

Lagon
*** It is now 4/13/09 10:42:00 AM ***

Welcome to DialogLink - Version 5 **Revolutionize the Way You Work!**

New on Dialog

Order Patent and Trademark File Histories Through Dialog

Thomson File Histories are now available directly through *Dialog*. Combined with the comprehensive patent and trademark information on *Dialog*, file histories give you the most complete view of a patent or trademark and its history in one place. When searching in the following patent and trademark databases, a link to an online order form is displayed in your search results, saving you time in obtaining the file histories you need.

Thomson File Histories are available from the following *Dialog* databases:

- CLAIMS/Current Patent Legal Status (File 123)
- CLAIMS/U.S. Patents (File 340)
- Chinese Patent Abstracts in English (File 344)
- Derwent Patents Citation Index (File 342)
- Derwent World Patents Index (for users in Japan) (File 352)
- Derwent World Patents Index First View (File 331)
- Derwent World Patents Index (File 351)
- Derwent World Patents Index (File 350)
- Ei EnCompassPat (File 353)
- European Patents Fulltext (File 348)
- French Patents (File 371)
- German Patents Fulltext (File 324)
- IMS Patent Focus (File 447, 947)
- INPADOC/Family and Legal Status (File 345)
- JAPIO - Patent Abstracts of Japan (File 347)
- LitAlert (File 670)
- U.S. Patents Fulltext (1971-1975) (File 652)
- U.S. Patents Fulltext (1976-present) (File 654)
- WIPO/PCT Patents Fulltext (File 349)
- TRADEMARKSCAN - U.S. Federal (File 226)

DialogLink 5 Release Notes

New features available in the latest release of DialogLink 5 (August 2006)

- Ability to resize images for easier incorporation into DialogLink Reports
- New settings allow users to be prompted to save Dialog search sessions in the format of their choice (Microsoft Word, RTF, PDF, HTML, or TEXT)
- Ability to set up Dialog Alerts by Chemical Structures and the addition of Index Chemicus as a structure searchable database
- Support for connections to STN Germany and STN Japan services

Show Preferences for details

? Help Off Line

* * *

Connecting to Rob Pond - Dialog - 264751

Connected to Dialog via SMS00400997

? B 15, 9, 610, 810, 275, 476, 624, 621, 636, 613, 813, 16, 160, 634,
148, 20, 35, 583, 65, 2, 347, 348, 349, 474, 475, 99, 256, 635, 570,
PAPERSMJ, PAPERSEU, 47

>>>W: 476 does not exist
1 of the specified files is not available

[File 15] **ABI/Inform(R)** 1971-2009/Apr 06

(c) 2009 ProQuest Info&Learning. All rights reserved.

[File 9] **Business & Industry(R)** Jul/1994-2009/Apr 11

(c) 2009 Gale/Cengage. All rights reserved.

[File 610] **Business Wire** 1999-2009/Apr 02

(c) 2009 Business Wire. All rights reserved.

**File 610: File 610 now contains data from 3/99 forward. Archive data (1986-2/99) is available in File 810.*

[File 810] **Business Wire** 1986-1999/Feb 28

(c) 1999 Business Wire . All rights reserved.

[File 275] **Gale Group Computer DB(TM)** 1983-2009/Mar 18

(c) 2009 Gale/Cengage. All rights reserved.

[File 624] **McGraw-Hill Publications** 1985-2009/Apr 10

(c) 2009 McGraw-Hill Co. Inc. All rights reserved.

[File 621] **Gale Group New Prod.Annou.(R)** 1985-2009/Mar 09

(c) 2009 Gale/Cengage. All rights reserved.

[File 636] **Gale Group Newsletter DB(TM)** 1987-2009/Mar 20

(c) 2009 Gale/Cengage. All rights reserved.

[File 613] **PR Newswire** 1999-2009/Apr 12

(c) 2009 PR Newswire Association Inc. All rights reserved.

**File 613: File 613 now contains data from 5/99 forward. Archive data (1987-4/99) is available in File 813.*

[File 813] **PR Newswire** 1987-1999/Apr 30

(c) 1999 PR Newswire Association Inc. All rights reserved.

[File 16] **Gale Group PROMT(R)** 1990-2009/Mar 20

(c) 2009 Gale/Cengage. All rights reserved.

**File 16: UD/banner does not reflect last processed date*

[File 160] **Gale Group PROMT(R)** 1972-1989

(c) 1999 The Gale Group. All rights reserved.

[File 634] **San Jose Mercury** Jun 1985-2009/Apr 10

(c) 2009 San Jose Mercury News. All rights reserved.

[File 148] **Gale Group Trade & Industry DB** 1976-2009/Mar 27

(c) 2009 Gale/Cengage. All rights reserved.

**File 148: The CURRENT feature is not working in File 148. See HELP NEWS148.*

[File 20] **Dialog Global Reporter** 1997-2009/Apr 13

(c) 2009 Dialog. All rights reserved.

[File 35] **Dissertation Abs Online** 1861-2009/Mar

(c) 2009 ProQuest Info&Learning. All rights reserved.

[File 583] **Gale Group Globalbase(TM)** 1986-2002/Dec 13

(c) 2002 Gale/Cengage. All rights reserved.

**File 583: This file is no longer updating as of 12-13-2002.*

[File 65] **Inside Conferences** 1993-2009/Apr 09

(c) 2009 BLDSC all rts. reserv. All rights reserved.

[File 2] **INSPEC** 1898-2009/Apr W1

(c) 2009 Institution of Electrical Engineers. All rights reserved.

[File 347] **JAPIO** Dec 1976-2008/Oct(Updated 090220)

(c) 2009 JPO & JAPIO. All rights reserved.

[File 348] **EUROPEAN PATENTS** 1978-200915

(c) 2009 European Patent Office. All rights reserved.

[File 349] **PCT FULLTEXT** 1979-2009/UB=20090402|UT=20090326

(c) 2009 WIPO/Thomson. All rights reserved.

[File 474] **New York Times Abs** 1969-2009/Apr 12

(c) 2009 The New York Times. All rights reserved.

[File 475] **Wall Street Journal Abs** 1973-2009/Apr 11

(c) 2009 The New York Times. All rights reserved.

[File 99] **Wilson Appl. Sci & Tech Abs** 1983-2009/Feb

(c) 2009 The HW Wilson Co. All rights reserved.

[File 256] **TecInfoSource** 82-2009/Dec
(c) 2009 Info.Sources Inc. All rights reserved.

[File 635] **Business Dateline(R)** 1985-2009/Apr 11
(c) 2009 ProQuest Info&Learning. All rights reserved.

[File 570] **Gale Group MARS(R)** 1984-2009/Mar 23
(c) 2009 Gale/Cengage. All rights reserved.

[File 387] **The Denver Post** 1994-2009/Apr 09
(c) 2009 Denver Post. All rights reserved.

[File 471] **New York Times Fulltext** 1980-2009/Apr 13
(c) 2009 The New York Times. All rights reserved.

[File 492] **Arizona Repub/Phoenix Gaz** 19862002/Jan 06
(c) 2002 Phoenix Newspapers. All rights reserved.

**File 492: File 492 is closed (no longer updating). Use Newsroom, Files 989 and 990, for current records.*

[File 494] **St LouisPost-Dispatch** 1988-2009/Apr 12
(c) 2009 St Louis Post-Dispatch. All rights reserved.

[File 631] **Boston Globe** 1980-2009/Apr 13
(c) 2009 Boston Globe. All rights reserved.

[File 633] **Phil.Inquirer** 1983-2009/Apr 12
(c) 2009 Philadelphia Newspapers Inc. All rights reserved.

[File 638] **Newsday/New York Newsday** 1987-2009/Apr 12
(c) 2009 Newsday Inc. All rights reserved.

[File 640] **San Francisco Chronicle** 1988-2009/Apr 10
(c) 2009 Chronicle Publ. Co. All rights reserved.

[File 641] **Rocky Mountain News** Jun 1989-2009/Jan 16
(c) 2009 Scripps Howard News. All rights reserved.
**File 641: This file has ceased updating*

[File 702] **Miami Herald** 1983-2009/Apr 11
(c) 2009 The Miami Herald Publishing Co. All rights reserved.

[File 703] **USA Today** 1989-2009/Apr 10
(c) 2009 USA Today. All rights reserved.

[File 704] **(Portland)The Oregonian** 1989-2009/Apr 11
(c) 2009 The Oregonian. All rights reserved.

[File 713] **Atlanta J/Const.** 1989-2009/Mar 08
(c) 2009 Atlanta Newspapers. All rights reserved.

[File 714] **(Baltimore) The Sun** 1990-2009/Apr 09
(c) 2009 Baltimore Sun. All rights reserved.

[File 715] **Christian Sci.Mon.** 1989-2009/Mar 27
(c) 2009 Christian Science Monitor. All rights reserved.

[File 725] (Cleveland) Plain Dealer Aug 1991-2009/Apr 09
(c) 2009 The Plain Dealer. All rights reserved.

[File 735] **St. Petersburg Times** 1989- 2009/Apr 10
(c) 2009 St. Petersburg Times. All rights reserved.

[File 477] **Irish Times** 1999-2009/Apr 12
(c) 2009 Irish Times. All rights reserved.

[File 710] **Times/Sun.Times(London)** Jun 1988-2009/Apr 12
(c) 2009 Times Newspapers. All rights reserved.

[File 711] **Independent(London)** Sep 1988-2006/Dec 12
(c) 2006 Newspaper Publ. PLC. All rights reserved.

**File 711: This file does not update. See NewsRoom for full daily coverage from many European sources.*

[File 756] **Daily/Sunday Telegraph** 2000-2009/Apr 13
(c) 2009 Telegraph Group. All rights reserved.

[File 757] **Mirror Publications/Independent Newspapers** 2000-2009/Apr 09
(c) 2009. All rights reserved.

[File 47] **Gale Group Magazine DB(TM)** 1959-2009/Apr 02
(c) 2009 Gale/Cengage. All rights reserved.

? S PD<20010831

Processing

Processing

Processing

Processing

Processing

Processing

Processing

Processing

Processing

Processing

Processing

Processing

Processing

Processing

Processing

Processing

Processing

Processing

Processing

Processing

Processing

Processing

Processing

Processing

Processing


```

Processing
Processing
      88274813  S1
      272865   S2
S3      118168  S S1 AND S2

? S S3 AND (CONFIGURATOR OR CONFIGURATORS)
      118168  S3
      14182   CONFIGURATOR
      2611    CONFIGURATORS
S4      734    S S3 AND (CONFIGURATOR OR CONFIGURATORS)

? S S4 AND ((CUSTOM OR CUSTOMIZE OR CUSTOMIZES OR CUSTOMIZING OR
CUSTOMIZABLE OR CUSTOMIZATION OR TAILOR OR TAILORS OR TAILORED OR
TAILORABLE OR TAILING) (5N) (RULE OR RULES))
Processing
Processing
      734     S4
      2044816 CUSTOM
      536735  CUSTOMIZE
      28445   CUSTOMIZES
      86757   CUSTOMIZING
      267743  CUSTOMIZABLE
      266266  CUSTOMIZATION
      376795  TAILOR
      38815   TAILORS
      862404  TAILORED
      3307    TAILORABLE
      44631   TAILING
      3618144 RULE
      5183009 RULES
      14499   (((((((((CUSTOM OR CUSTOMIZE) OR CUSTOMIZES) OR
CUSTOMIZING) OR CUSTOMIZABLE) OR CUSTOMIZATION) OR TAILOR) OR TAILORS)
OR TAILORED) OR TAILORABLE) OR TAILING) (5N) (RULE OR RULES))
S5      34    S S4 AND ((CUSTOM OR CUSTOMIZE OR CUSTOMIZES OR
CUSTOMIZING OR CUSTOMIZABLE OR CUSTOMIZATION OR TAILOR OR TAILORS OR
TAILORED OR TAILORABLE OR TAILING) (5N) (RULE OR RULES))

? S S5 AND (EXPRESSION OR EXPRESSIONS OR TEMPLATE OR TEMPLATES OR
NATURAL(W)LANGUAGE OR OPERATOR OR OPERATORS OR OPERAND OR OPERANDS OR
BOOLEAN OR FORMULA OR EQUATION OR EQUATIONS)
Processing
Processing
Processing
      34     S5
      1382405 EXPRESSION
      1307400 EXPRESSIONS
      298414  TEMPLATE
      238415  TEMPLATES
      8411773 NATURAL
      3716486 LANGUAGE
      80191   NATURAL(W)LANGUAGE
      3838928 OPERATOR
      3544421 OPERATORS
      12371   OPERAND
      10819   OPERANDS
      61956   BOOLEAN

```

2050931 FORMULA
1150486 EQUATION
818555 EQUATIONS
S6 14 S S5 AND (EXPRESSION OR EXPRESSIONS OR TEMPLATE OR
TEMPLATES OR NATURAL(W)LANGUAGE OR OPERATOR OR OPERATORS OR OPERAND OR
OPERANDS OR BOOLEAN OR FORMULA OR EQUATION OR EQUATIONS)

? t s6/k/all

6/K/1 (Item 1 from file: 15) [Links](#)

ABI/Inform(R)

(c) 2009 ProQuest Info&Learning. All rights reserved.

Abstract:

...forced to either build an in-house system or purchase a packaged stand-alone product **configurator**. **Configurators** often were not rules-based and did not generate routings or bills of material. Therefore, materials requirements planning could not take place based on input from the **configurator**. Today, the product **configurator** market has matured to keep up with the growth of complex **products** and mass **customization**. Offering an embedded **product configurator** within an enterprise resources planning system has become the norm, rather than the exception. Besides the traditional markets for product **configurators** of industrial equipment, heavy machinery, and electronics, they also are finding use in the manufacture of **custom-built products**, including telecommunications equipment, furniture, doors/windows, PCs, stereos, and specialty products.

Text:

Headnote:

Product **configurators** give more power to Ericsson Radio, DeBourgh, and others

THE MAKE-TO-ORDER PROcess is...

...ingrained at DeBourgh Manufacturing, a La Junta, Colo.-based supplier of metal lockers. The company **customizes** all its **products**-only a base model and price are standard. There are very few duplicate parts; new

...

...Manage 2000 enterprisewide solution to speed order processing and reduce finished goods inventory. A product **configurator** embedded in the Unix-based system simplifies order entry by asking the **operator** which options the customer needs, and then applies predefined rules to correctly configure the end product. The **configurator** then populates the attributes of the newly configured item, tests for conflicts, and generates the appropriate bill of material, routing, and price based on **rules** and calculations.

With **custom**-built screens, the 15 DeBourgh users drill down through the order-entry process using only...

...forced to either build an in-house system-that may have functioned simply as a **template**-or purchase a packaged stand-alone product **configurator**. Many systems went only as far as determining whether or not a configuration could be...

...time frame, customers could wait days or weeks before receiving responses on quotes or proposals. **Configurators** often were not rulesbased and did not generate routings or bills of material. Therefore, materials requirements planning (MRP) could not take place based on input from the **configurator**. MRP techniques use bills of material, inventory data, and master production schedules to calculate requirements...

...andoptions facility as a part of the basic package functionality. Features-andoptions systems are primitive **configurators**, where the choices (options) within each category (feature) are predefined in a modular bill of...

...order handling, its rigidity often limits it to true assemble-to-order environments.

Today, the product **configurator** market has matured to keep up with

the growth of complex **products** and mass **customization**. Offering an embedded **product configurator** within an ERP system has become the norm, rather than the exception. As some **configurators** have adapted to include more sales, marketing, and financial functions, such as pricing, cost analysis, and order status, the term "sales" **configurator** is being applied to more aptly describe their extended role. Other advanced features, such as increased automation, generic navigation tools, and workflow processes are helping non-technical **operators** enter orders in an easy-to-use format. Bolt-on or stand-alone **configurators** also have evolved to handle more of these type functions, but must link to ERP systems to receive inventory and production data (see sidebar).

Besides the traditional markets for product **configurators** of industrial equipment, heavy machinery, and electronics, they also are finding use in the manufacture of **custom-built products**, including telecommunications equipment, furniture, doors/windows, PCs, stereos, and specialty products. Manufacturers such as DeBourgh, JII Sales Promotion Assoc., Ericsson Radio Systems, and Datacard are using product **configurators** for unique applications—including remote order entry for salespeople—to cut order processing time, reduce finished goods inventory, improve accuracy, and introduce new product lines.

Sold on integration

Not all **configurators** are alike; their level of integration and types of interfaces vary considerably, says Chris Roon, a company vice president for PeopleSoft, Pleasanton, Calif. The strength of the company's product **configurator**, part of the PeopleSoft 7 system, is the ability to create and maintain a single...

...and engineering rules only have to be changed in one place," he says. "Stand-alone **configurators** are limited by relying on a batch interface with one set of rules in the **configurator** and production information in the host. These type configurations are not immediately consistent with manufacturing. A standalone **configurator** may tell you if a ...price, but it may not tell you if it can be built."

With PeopleSoft's **configurator**, users can view the different production capabilities in each plant site, says Roon, by accessing...

...and it can be built," says Roon.

The data synchronization that occurs between a sales **configurator** and an ERP system also is a critical part of the Adaptlications suite for manufacturing...

...management, the system includes an optional configure-to-order module.

With the integrated solution, the **configurator** accesses information in the corporate database, such as customer or product master data, to construct...

...pricing, or plan production schedules.

"When different technology backbones and data models are used, product **configurators** don't have a mirror into ERP systems," says Scott Galloway, an ERP solutions director...
...a host system maintains different definitions of pricing structures, customers, and products than the product **configurator**."

The company's Application Integration Services engine uses stored procedures and triggers to communicate with...

...At Ericsson, Emmen, The Netherlands, a unique workflow process developed using Cincom Acquire, a sales **configurator** and selling system, has helped streamline order processing and speed production. Available from Cincom Systems...

...when choosing a system to configure its products. The company has been running System 21 **Configurator** from JBA International, Rolling Meadows, Ill., for about three months for its parts and supplies...

...have options because the equipment either can be sold as components or whole systems."

The **configurator** is used by 10 internal order-entry operators

, but the company plans to roll out an enhanced version to its 150 remote salespeople...JBA, users would have to rekey data or build their own customized connection. "Very few **configurators** have this feature, and it's particularly useful for electrical equipment. When a configuration is... ..engineering rules, pricing changes or product promotions."

Micro-MRP's MAX ERP system includes a **template**-based product **configurator**, and the company plans to add an enhanced, rules-based **configurator** from Exactium, Atlanta, by the end of this year. The Windows NT-based **configurator**, written in Visual C++, will be embedded into MAX and not sold on a stand...

...typically elaborate process of configuring products has become easier and more manageable for non-technical **operators**. The benefits are there for those manufacturers that want to learn how product **configurators** will enhance their businesses.

Sidebar:

For more info

Sidebar:

BT Squared Technolgoies,

Atlanta circle 1...

6/K/2 (Item 1 from file: 349) [Links](#)

Fulltext available through: [Order File History](#)

PCT FULLTEXT

(c) 2009 WIPO/Thomson. All rights reserved.

	Country	Number	Kind	Date
Patent				19

Detailed Description:

...5 is a schematic illustration of the relationship between areas of core competence of both **operators** and manufacturers for creating an environment for new business relationships in accordance with an embodiment...that can be used to manage an enterprise's content; Figure 102 illustrates an exemplary **template** with three Dynamic Content Areas (DCAs) embedded within the **template** in accordance with a method of associating a rule and content to an interaction;

Figure...in accordance with an embodiment of the present invention; Figure 124 illustrates the Decision Support **component** of the eCommerce Application

Framework in accordance with one embodiment of the present invention;

Figure...de variety of user interface components.

With Java, developers can create robust User Interface (LTI) **components**. Custom "widgets" (e.g., real-time stock tickers, animated icons, etc.) can be created, and client...5 is a schematic illustration of the relationship between areas of core competence of both **operators** and manufacturers for creating an environment for new business relationships in accordance with an embodiment...level. Although data communication between DCEs of the network is routinely handled by the network **operator** typically using techniques other than X.25, communication between the individual user system and the...1

4NS assets to address carrier network management in a data networking world. This solution **template** enables the convergence of circuit and packet switching network control centers and workforces.

The present... ..element managers is utilized by the information services manager to provide information to the network **operators**. The information services manager adheres to CORBA standards to provide ubiquitous information access via an...the alarm in the operational database and then forward the alarm to the appropriate network **operator**.

Media and textual databases are also provided by the information services manager. The databases includes... ..54

Software and Assets

Managed Net-worked Services Integrated Solution- The integrated network management solution **template** consists of a suite of best of breed third party software products that automate problem diagnosis, notification, custom-developed reporting, and IP services monitoring. This solution **template** is a great first step in realizing our technology solution vision.

Web-Based SLA Reporting... ..a browser based tool that provides the personalized SLA reports to customers in both a **template** and ad-hoc format.

Data Mining Demonstration - Provides the capability to analyze network management data...ensure that the launch is successfully executed.

68

Service Consolidation and Optimization

As the network **operator** moves into operating and maintaining the "NGN", there will be many parallel market driven journeys...CDR, Expanded Call Detail Record (ECDR), Private Network Record (PNR), Expanded Private Network Record (EPNR), **Operator** Service Record (OSR), Expanded **Operator** Service Record (EOSR), Private **Operator** Service Record (POSR), Expanded Private **Operator** Service Record (EPOSR), and Switch Event Record (SER). Each record is 32 words in length...and POSR, and thereby the EOSR and EPOSR, contain information regarding a telephone call requiring **operator** assistance and are generated at switches or systems actually 10 equipped with **operator** positions. A switch completes an OSR for a non-VNET customer and completes a POSR... These records are only generated at switches or systems that have the capability of performing **operator** services or network audio response system (NARS) functions. The formats of the two (2) records... must be translated to another number within the network. Therefore, when a caller uses an **operator** service, the switch 1206-1210 records the dialed numbers in expanded record (EOSR, EPOSR) 3616... if the pre-translated digits of a call 3602 as dialed by a caller without **operator** assistance has more than ten (10) digits. If there are more than ten (10) pre... a switch 1206-1210 determines if the time and charges feature was used by an **operator**. The time and charges feature is typically used in a hotel scenario when a hotel guest makes a telephone call using the **operator's** assistance and charges the call 3602 to her room. After the call 3602 has completed, the **operator** informs the hotel guest of the charge, or cost, of the call 3602. If the... a value of $-21,600 (-1 * 360 \text{ minutes} * 60 \text{ seconds/minute} = -21,600 \text{ seconds})$. Using equation (ii) from above, if the local switch time were midnight, the corresponding epoch time might... corrimand which is the second command for changing time. In Figure 39, after a switch **operator** enters the Change Daylight Savings Time command, the switch enters step 3902 and prompts the switch **operator** to select either a Forward or Backward time change. Continuing to step 3904, the switch **operator** makes a selection. In step 3904, if the switch **operator** selects the Forward option, the switch enters step 3906. In step 3906, the switch sets... The switch then proceeds to step 3910. Referring back to step 3904, if the switch **operator** selects the Backward option, the switch sets the Local Switch Time back one hour and... the Time Offset. The switch then proceeds to step 3910.

In step 3910, the switch **operator** must verify the forward or backward option and the new Local Switch Time and Time Offset before the actual time change takes place. If in step 3910, the switch **operator** verifies the new time and Time Offset, the switch proceeds to step 3912 and generates... to step 3914 and exits the command. Referring back to step 3910, if the switch **operator** does... Accordance

With A Preferred Embodiment

In today's telephony environment, a caller must contact an **operator** to initiate a conference call and/or have all parties dial a common number to connect into a conference call. This requires the cost of a human **operator** and the inconvenience of dialing a predefined number to be carried as overhead of each... could be joined without intervention of the calling party. Internet callers are supported and an **operator** can be joined as required.

Before describing this aspect of the present invention, a...voice capability, and can initiate a video screen popup on the computer display for manual **operator** assistance as detailed above in the description of a video **operator**.

Self-Re2ulatinIZ System

An expert system monitors each call in accordance with a preferred embodiment manual **operator** if no other correction of the connection is available.

For example, if a caller hangs... ..events from the packet infrastructure with the Core circuit-based network events to provide the **operators** with a seamiess service oriented view of the overall health of the network;

2. Event...a number of event lists and views, all of which are highly customizable by each **operator**.

Notification Spooler 4622 - A **custom** provided sub-**component** which spools job-files that specify which events have occurred for possible notifications.

112

Spooled... ..Eachiobis stored as a file in a special notification spool directory.

Notification Actor 4626 - A **custom** provided sub-**component** which determines the alert time, source node, and alert type from the loaded spooled job...element managers is utilized by the infonnation services manager to provide information to the network **operators**. The information services manager adheres to CORBA standards to provide ubiquitous information access via an... ..alan-n in the operational database and then forward the alarm to the appropriate network **operator**.

Media and textual databases are also provided by the information services manager. The databases includes...asked a series of questions by an interactive voice response (IVR) system or an live **operator**. The customer uses Touch-Tone keys on the telephone to respond to these queries from the IVR, or responds normally to a live **operator**.

When a product support engineer becomes available, the previously gathered information (both from the IVR...configurability which can be shaped by WAF participants, through the use, for example, of WAF **templates**, to employ specific capabilities, along, for example, with capability parameter data to reflect the elements...that the needs of the user are assessed by gathering input from the user.

PRODUCT CONFIGURATOR

Lists all the options related to a product or service

Allows users to piece together...to write custom

extensions to the HTTP server software using a conventional programming

language, such **custom** extensions are difficult to write except by experienced programmers.

Thus, to be able to quickly...group.

The Lotus Notes Application Development Environment provides for such features as (i) application design **templates** which are said to allow sophisticated

168

applications to be built by customizing pre-built...received electronic mail could be stored in

a dynamic customer interaction database. The plurality of **templates** for publishing data in various forms may include **templates** generated based on the user profile. These options and others will be discussed in more...multiple data sources: static, database, third party site Matches content to users via configurable business **rules**

Allows **custom template** based publishing

The content channels component of the present invention also provides for generic and custom **template** based publishing by displaying selected content and applications based on the profile of a user...

Claims:

...EAC5 EAC6 EAC7 EAC8

60 EAC9 EAC10 EAC11 EAC1261 OPIN . 1 OVFC562 TP5-**OPERATOR** RELEASE63i
RN1 1 RN2 1 RN3 RN4BIT 00 01 02 03 04 05...EOSIRECORD FORMAT RECORD
FORMAT RECORD RECORDFORMAT3708 3710Figure 37PROMPT
SWITCH**OPERATOR** FOR 3802LOCAL SWITCH TIMEANDTIME OFFSET
FROMUTCYISDISPLAY ENTERED 3804TIME AND TIMEOFFSET BACK TOSWITCH
OPERATOR3806SWIT 3810OPEFIED E RE NO EXITTIME AND TIMEOFFSET?Y
S1GENERATE SER 3808WITH EVENTQUALIFIER = 2Figure 3838/129PROMPT
SWITCH

OPERATOR FOR Ir- 3902FORWARD ORBACKWARD
TIMECHANGE3904FORWARD 0 BACKWARDKWARD TI3906...rocessin L>ynamic
Hending Customer Feedbacl rontent Workflow EEinjingAc:cServices Capabile5 (physica
Content Subscilptitii (**template** based Sumeysnone@tmnic) nis publishing)Fieds
@.@ssessrne@wi i Li ense FAOS Events, Cali...THE TRANSMISSION OF ELECTRONIC
MAIL 6610ORGANIZING RECEIVED ELECTRONIC MAIL14PROVIDING A
PLURALITY OF **TEMPLATES** FOR PUBLISHING DATA IN
VARICUSFORMS5302Figure 6666/129P%7nMANAGING
PROFILE...wmwWJ10202DCA1STATIC
CONTENTDYNAMICCONTENTAREAS10204DCA2@/ 10206DCA3Figure 102HTML
TEMPLATE95/129MONITORING OPERATION OF ENTITIES SELECTED FROM THE
10402GROUP CONSISTING OF SERVER PROCESSES...

6/K/3 (Item 2 from file: 349) [Links](#)

Fulltext available through: [Order File History](#)

PCT FULLTEXT

(c) 2009 WIPO/Thomson. All rights reserved.

	Country	Number	Kind	Date
Patent				19

Detailed Description:

...5 is a schematic illustration of the relationship between areas of core competence of both **operators** and manufacturers for creating an environment for new business relationships in accordance with an embodiment...that can be used to manage an enterprise's content; Figure 102 illustrates an exemplary **template** with three Dynamic Content Areas (DCAs) embedded within the **template** in accordance with a method of associating a rule and content to an interaction;

Figure...5 is a schematic illustration of the relationship between areas of core competence of both **operators** and manufacturers for creating an environment for new business relationships in accordance with an embodiment...scales MNS assets to address carrier network management in a data networking world. This solution **template** enables the convergence of circuit and packet switching network control centers and workforces.

50

The...element, managers is utilized by the information services manager to provide information to the network **operators**. The information services manager adheres to CORBA standards to provide ubiquitous information access via an... ..the alarm in the operational database and then forward the alarm to the appropriate network **operator**.

Media and textual databases are also provided by the information services manager. The databases includes The integrated network management solution **template** consists of a suite of best of breed third. party software products that automate problem diagnosis, notification, custom-developed reporting, and IP services monitoring. This solution **template** is a great first step in realizing our technology solution vision.

Web-Based SLA Reporting... ..a browser based tool that provides the personalized SLA reports to customers in both a **template** and ad-hoc format.

55

Data Mining Demonstration - Provides the capability to analyze network management...quality management, program planning and management tool-kits.

Service Consolidation and Optimization

As the network **operator** moves into operating and maintaining the "NGN", there will be many parallel market driven journeys...feeds data to the Discounting Process 1306. The Discounting Process 1306 applies the correct rating **rules** on a customer-by-customer basis, and applies discounts for events, such as outages and...CDR), Expanded Call Detail Record (ECDR), Private Network Record (PNR), Expanded Private Network Record (EPNR), **Operator** Service Record (OSR), Expanded **Operator** Service Record (EOSR), Private

Operator Service Record (POSR), Expanded Private **Operator** Service Record (EPOSR), and Switch Event Record (SER). Each record is 32 words in length...and POSR, and thereby the EOSR and EPOSR, contain information regarding a telephone call requiring **operator** assistance and are generated at switches or systems actually equipped with **operator** positions. A switch completes an OSR for a non- VNET customer and completes a POSR... records are only generated at switches or systems that have the capability of performing **operator** services or network audio response system (NARS) functions. The formats of the two (2) records... must be translated to another number within the network. Therefore, when a caller uses an **operator** service, the switch 12061210 records the dialed numbers in expanded record (EOSR, EPOSR) 3616.

In... if the pre-translated digits of a call 3602 as dialed by a caller without **operator** assistance has more than ten (10) digits. If there are more than ten (10) pre... a switch 1206-1210 determines if the time and charges feature was used by an **operator**. The time and charges feature is typically used in a hotel scenario when a hotel guest makes a telephone call using the **operator's** assistance and charges the call 3602 to her room. After the call 3602 has completed, the **operator** informs the hotel guest of the charge, or cost, of the call 3602. If the... a value of $-21,600 (-1 * 60 \text{ seconds/minute} = -21,600 \text{ seconds})$. Using equation (11) from above, if the ...changes the Local Switch Time and the Time Offset. In Figure 38, after a switch **operator** enters the Change Time command, the switch enters step 3802 and prompts the switch **operator** for the Local Switch Time and Time Offset from UTC. In step 3802 the switch **operator** enters a new Local Switch Time and Time Offset. Continuing to step 3804, the new time and Time Offset are displayed back to the switch **operator**. Continuing to step 3806, the switch **operator** must verify the entered time and Time Offset before the actual time and offset are changed on the switch. If in step 3806 the switch **operator** verifies the changes, the switch proceeds to step 3808 and generates a SER with an... command which is the second command for changing time. In Figure 39, after a switch **operator** enters the Change Daylight Savings Time command, the switch enters step 3902 and prompts the switch **operator** to select either a Forward or Backward time change. Continuing to step 3904, the switch **operator** makes a selection. In step 3904, if the switch **operator** selects the Forward option, the switch lo. enters step 3906. In step 3906, the switch... The switch then proceeds to step 3910. Referring back to step 3904, if the switch **operator** selects the Backward option, the switch sets the Local Switch Time back one hour and... the Time Offset. The switch then proceeds to step 3910.

In step 3910, the switch **operator** must verify the forward or backward option and the new Local Switch Time and Time Offset before the actual time change takes place. If in step 3910, the switch **operator** verifies the new time and Time Offset, the switch proceeds to step 3912 and generates... to step 3914 and exits the command. Referring back to step 3910, if the switch **operator** does not verify the changes, the switch proceeds to step 3914 and exits the command without... Accordance

With A Preferred Embodiment

In today's telephony environment, a caller must contact an **operator** to initiate a conference call and/or have all parties dial a common number to connect into a conference call. This requires the cost of a human **operator** and the inconvenience of dialing a predefined number to be carried as overhead of each... could be joined without intervention of the calling party, Internet callers are supported and an **operator** can be joined as required.

Before describing this aspect of the present invention, a description...and can initiate a video

screen popup on the computer

util

display for manual **operator** assistance as detailed above in the description of a video **operator**.

Self-Regulating System

An expert system monitors each call in accordance with a preferred embodiment... PSTN or the internet. In addition, the system includes a default connection to a manual **operator** if no other correction of the connection is available.

For example, if a caller hangs... events from, the packet infrastructure with the Core circuit-based network events to provide the **operators** with a seamless service oriented view of the overall health of the network;

2. Event... Netcool Object Server 4620 - The Omnibus Netcool Object Server is a real-time memory

111

operator.

Notification SDooler 4622 - A **custom** provided sub-**component** which spools job-files that specify which events have occurred for possible notifications.

Spooled job a special notification spool directory.

Notification Actor 4626 - A **custom** provided sub-**component** which determines the alert time, source node, and alert type from the loaded spooled j... elements that make up the hybrid network are very different from one another. Thus, **custom** software is generally needed for each network element or group of related network elements. The...element managers is utilized by the information services manager to provide information to the network **operators**. The information services manager adheres to CORBA standards to provide ubiquitous information access via an... Element Manager receives events from various network elements. Preferably the events are provided by **custom** software interfaces which communicate directly with network elements. The software interfaces preferably process the raw...asked a series of questions by an interactive voice response (IVR) system or a live **operator**. The customer uses Touch-Tone keys on the telephone to respond to these queries from the IVR, or responds normally to a live **operator**.

When a product support engineer becomes available, the previously gathered information (both from the IVR... is allowed to enter queues for help in installing or using the sponsor/vendor's **product**. As an optional promotional service, upon termination of the on-line help session, access to...configurability which can be shaped by WAF participants, through the use, for example, of WAF **templates**, to employ specific capabilities, along, for example, with capability parameter data to reflect the elements...that the needs of the user are assessed by receiving input from the user.

PRODUCT CONFIGURATOR

Lists all the options related to a product or service

Allows users to piece together...the standard HTTP server software, without any additional programming, is very limited. For example, without **custom** extensions, an FITTP server

cannot accommodate complex transactions between a user and the HTTP server...
 ...authorized The Lotus Notes Application Development Environment provides for such features as (1) application design **templates** which are said to allow sophisticated applications to be built by customizing pre-built applications...received electronic mail could be stored in a diariac customer interaction database. The plurality of **templates** for publishing data in various forms may include, templates generated based on the user profile...multiple data sources: static, database, third party site
 Matches content to users via configurable business **rules**
 Allows **custom template** based publishing
 The content channels component of the present invention also provides for generic and custom

template based publishing by displaying selected content and applications based on the profile of a user...

Claims:

...EAC5 EAC6 EAC7 EAC8
 60 EAC9 EAC10 EAC11 EAC1261 OPIN IOVFCS62 TP5-**OPERATOR** RELEASE631
 RN1 1 RN2 1 RN3 RN4BIT 00 01 02 03 04 05... ..Figure 363602 CALL3702 37043700ME
 ANDDE GEFEATUCALL USED BY**OPERATOR**?NONO YES Y SUSE
 ECDREPNR USE ...RECORD USE EOSRRECORD FORMAT RECORD FORMAT
 FORMAT RECORDP3708 3710Figure 37PROMPT SWITCH**OPERATOR** FOR
 3802LOCAL SWITCH TIMEANDTIME OFFSET FROMUTCYISDISPLAY ENTERED
 3804TIME AND TIMEOFFSET BACK TOSWITCH **OPERATOR**3806SWITCH
 3810**OPERATOR**FIED ENTERE NO EXITTIME AND TIMEOFFSY SGENERATE SER
 3808WITH EVENTQUALIFIER = 2Figure 38PROMPT SWITCH**OPERATOR** FOR
 3902FORWARD ORBACKWARD TIMECHANGE904FORWARD OR
 ACKWARDCKWA TI3906 CHANGE...OF ELECTRONIC MAIL 66106612ORGANONG
 RECEIVED ELECTRONIC MAIL1 6614PROVIDING A PLURALITY OF **TEMPLATES**
 FOR PUBLISHING DATA IN VARIOUSFORIVIS5302Figure 6667 0MANAGING
 PROFILE DATA OF...NAVIGATION10202DCA1DYNAMIC STATIC
 CONTENTCONTENTAREAS10204DCA210206DCA3Figure 102HTML
TEMPLATEMONITORING OPERATION OF ENTITIES SELECTED FROM THE
 10402GROUP CONSISTING OF SERVER PROCESSES, DISK SPACE...

	Country	Number	Kind	Date
Patent				19

Detailed Description:

...5 is a schematic illustration of the relationship between areas of core competence of both **operators** and manufacturers for creating an environment for new business relationships in accordance with an embodiment...catalog that can be used to manage an enterprise's content; Figure 102 illustrates an exemplary **template** with three Dynamic Content Areas (DCAs) embedded within the **template** in accordance with a method of associating a rule and content to

an interaction;

Figure...wide variety of user interface components.

With Java, developers can create robust User Interface (UI) **components**. **Custom** "widgets" (e.g., real-time stock tickers, animated icons, etc.) can be created, and client... for improved performance. Dynamic, real-time Web pages can be created. Using the above-mentioned **custom UI components**, dynamic Web pages can also be created.

Sun's Java language has emerged as an...5 is a schematic illustration of the relationship between areas of core competence of both **operators** and manufacturers for creating an environment for new business relationships in accordance with an embodiment...are transmitted from a source-such as a user terminal, computer, application program within a **computer**, or other data handling or data communication device--to a destination, which may be simply... level. Although data communication between DCEs of the network is routinely handled by the network **operator** typically using techniques other than X.25, communication between the individual user system and the...scales MNS assets to address carrier network management in a data networking world. This solution **template** enables the convergence of circuit and packet switching network control centers and workforces.

The present... element managers is utilized by the information services manager to provide information to the network **operators**. The information services manager adheres to CORBA standards to provide ubiquitous information access via an... the alarm in the operational database and then forward the alarm to the appropriate network **operator**,

51

Media and textual databases are also provided by the information services manager. The databases...time logging calls.

Software and Assets

ManagedNetworked Services Integrated Solution- The integrated network management solution **template** consists of a suite of best of breed third party software products that

53

automate problem diagnosis, notification, custom-developed reporting, and IP services monitoring. This solution **template** is a great first step in realizing our technology solution vision.

Web-Based SLA Reporting... ...a browser based tool that provides the personalized SLA reports to customers in both a **template** and ad-hoc format.

Data Mining Demonstration - Provides the capability to analyze network management data...quality management, program planning and management tool-kits.

Service Consolidation and Optimization

As the network **operator** moves into operating and maintaining the "NGN", there ...a public 1 5 telecommunication system dedicated to a specific geographic region, but can define **custom** telephone numbers.

Upon processing a telephone call, a switch must generate a call record large...CDR), Expanded Call Detail Record (ECCR), Private Network Record (PNR), Expanded Private Network Record (EPNR), **Operator** Service Record (OSR), Expanded **Operator** Service Record (EOSR), Private **Operator** Service Record (POSR), Expanded Private **Operator** Service Record (EPOSR), and Switch Event Record (SER). Each record is 32 words in length... ...and POSR, and thereby the EOSR and EPOSR, contain information regarding a telephone call requiring **operator** assistance and are generated at switches or systems actually 1 0 equipped with **operator** positions. A switch completes an OSR for a non- VNET customer and completes a POSR... ...These records are only generated at switches or systems that have the capability of performing **operator** services or network audio response system (NARS) functions. The for-nats of the two (2...must be translated to another number within the network. Therefore, when a caller uses an **operator** service, the switch 1206-121 0 records the dialed numbers in expanded record (EOSR, EPOSR... ...a switch 1206-1210 determines if the time and charges feature was used by an **operator**. The time and charges feature is typically used in a hotel scenario when a hotel guest makes a telephone call using the **operator's** assistance and charges the call 3602 to her room. After the call 3602 has completed, the **operator** informs the hotel guest of the charge, or cost, of the call 3602. If the...a value of -21,600 (-1 * 360 minutes* 60 seconds/minute = -21,600 seconds). Using equation (ii) from above, if the local switch time were midnight, the corresponding epoch time might... ...changes the Local Switch Time and the Time Offset. In Figure 38, after a switch **operator** enters the Change Time command, the switch enters step 3802 and prompts the switch **operator** for the Local Switch Time and Time Offset from UTC. In step 3802 85

the switch **operator** enters a new Local Switch Time and Time Offset. Continuing to step 3804, the new time and Time Offset are displayed back to the switch **operator**. Continuing to step 3806, the switch **operator** must verify the entered time and Time Offset before the actual time and offset are changed on the switch. If in step 3806 the switch **operator** verifies the changes, the switch proceeds to step 3808 and generates a SER with an... ...to step 3810 and exits the command. Referring back to step 3806, if the switch **operator** does not verify the changes, the switch proceeds to step 3810 and exits the command... ...command which is the second command for changing time. In Figure 39, after a switch **operator** enters the Change Daylight Savings Time command, the switch enters step 3902 and prompts the switch **operator** to 1 5 select either a Forward or Backward time change. Continuing to step 3904, the switch **operator** makes a selection. In step 3904, if the switch **operator** selects the

Forward option, the switch enters step 3906. In step 3906, the switch sets... ..The switch then proceeds to step 3910. Referring back to step 3904, if the switch **operator** selects the Backward option, the switch sets the Local Switch Time back one hour and... ..the Time Offset. The switch then proceeds to step 3910.

In step 3910, the switch **operator** must verify the forward or backward option and the new Local Switch Time and Time Offset before the actual time change takes place. If in step 3910, the switch **operator** verifies the new time and Time Offset, the switch proceeds to step 3912 and generates... ..to step 3914 and exits the command. Referring back to step 3910, if the switch **operator** does not verify the changes, the switch proceeds to step 3914 and exits the command... ..Accordance

With A Preferred Embodiment

In today's telephony environment, a caller must contact an **operator** to initiate a conference call and/or have all parties dial a common number to connect into a conference call. This requires the cost of a human **operator** and the inconvenience of dialing a predefined number to be carried as overhead of eac... ..could be joined without intervention of the calling party, Internet callers are supported and an **operator** can be joined as required.

1 0 Before describing this aspect of the present invention...voice capability, and can initiate a video screen popup on the computer display for manual **operator** assistance as detailed above in the description of a video **operator**.

Self-Regulating System

An expert system monitors each call in accordance with a preferred embodiment... ..a PSTN or the internet. addition, the system includes a default connection to a manual **operator** if no other correction of the connection is available For example, if a caller hangs... ..events from the packet infrastructure with the Core circuit-based network events to provide the **operators** with a seamless service oriented view of the overall health of the network;

2. Event...a number of event lists and views, all of which are highly customizable by each **operator**.

Notification Spool 4622 - A **custom** provided sub-**component** which spools job-files that specify which events have occurred for possible notifications.

Spooled Job... ..stored as a file in a special notification spool directory.

iii

Notification Actor 4626 - A **custom** provided sub-**component** which determines the alert time, source node, and alert type from the loaded spooled job...managers is utilized by the information services manager to provide information to the network **operators**. The information services manager adheres to CORBA standards to provide ubiquitous information access via...the alarm in the operational database and then forward the alarm to the appropriate network **operator**.

Media and textual databases are also provided by the information services manager. The databases includes... ..asked a series of questions by an interactive voice response (IVR) system or an live **operator**. The customer uses Touch-Tone keys on the telephone to respond to these queries from the IVR, or responds normally to a live **operator**.

When a product support ...of a great number of individual networks, together forming a global connection of thousands of **computer** systems. After understanding that machines are connected to the individual networks, we can investigate how...configurability which can be shaped by WAF participants, through the use, for example, of **WAY templates**, to employ specific capabilities, along, for example, with capability parameter data to reflect the elements...pathway of WAF content control information handling.

CATALOG CAPABILITIES

Displays linkable pictures and text

147

Customizes rendering based on user preferences

Provides multiple ways to traverse the catalog (ease of navigation...that the needs of the user are assessed by receiving input from the user.

PRODUCT

CONFIGURATOR

Lists all the options related to a product or service

Allows users to piece together...for data and subsequently displays the data. Also, various vertical market segments, such as hotels, **car** rental agencies, restaurants, retail sales, mail sales/telephone sales require interfaces for different types of...group.

The Lotus Notes Application Development Environment provides for such features as (i) application design **templates** which are said to allow sophisticated applications to be built by customizing pre-built applications...

Claims:

...59 EAC5 EAC6 EAC7 EAC8

60 EAC9 EAC10 EAC11 EAC1261 OPIN JOVFCS62 TP5-**OPERATOR** RELEASE63

RN1 RN2 RN3 RN4BIT 00 01 02 03 04 05 06 07... ..FORMAT RECORD FORMAT

RECORD RECORD FOIFORMAT3708 0Figure 371 FFPROMPT SWITCH**OPERATOR**

FOR 3802LOCAL SWITCH TIMEANDTIME OFFSET FROMUTCYIsDISPLAY

ENTERED 3804TIME AND TIMEOFFSET BACK TOSWITCH

OPERATOR3806SWITCH 3810.0PERAT RRIFIED ENTERE NO EXITTIME AND

TIMEOFFSY S3808GENERATE SERWITH EVENTQUALIFIER = 2Figure

3838/129PROMPT SWITCH**OPERATOR** FORFORWARD OR 3902BACKWARD

TIMECHANGE904FORWARD TIM BACKWARD3906 CHANGE?-.@r 3908...THE

TRANSMISSION OF ELECTRONIC MAIL 6610612ORGANIZING RECEIVED

ELECTRONIC MAILPROVIDING A PLURALITY OF **TEMPLATES** FOR

PUBLISHING DATA IN VARIOUS 6614FORMS5302Figure 6666/129MANAGING

PROFILE DATA...ZJ10202DCAISTATIC

CONTENTDYNAMICCONTENTAREAS10204DCA210206DCA3Figure 102HTIVIL

TEMPLATE95/129MONITORING OPERATION OF ENTITIES SELECTED FROM THE

10402GROUP CONSISTING OF SERVER PROCESSES...

6/K/5 (Item 4 from file: 349) [Links](#)

Fulltext available through: [Order File History](#)

PCT FULLTEXT

(c) 2009 WIPO/Thomson. All rights reserved.

	Country	Number	Kind	Date
Patent				19

Detailed Description:

...5 is a schematic illustration of the relationship between areas of core competence of both **operators** and manufacturers for creating an environment for new business relationships in accordance with an embodiment...that can be used to manage an enterprise's content; Figure 102 illustrates an exemplary **template** with three Dynamic Content Areas (DCAs) embedded within the **template** in accordance with a method of associating a rule and content to an interaction;

1...out. As shown, the present invention may be practiced in the context of a personal **computer** such as an IBM compatible personal **computer**, Apple Macintosh **computer** or UNIX based workstation.

A representative hardware environment is depicted in Figure 1, which illustrates...wide variety of user interface components.

With Java, developers can create robust User Interface (UI) **components**. **Custom** "widgets" (e.g., real-time stock tickers, animated icons, etc.) can be created, and client...for improved performance. Dynamic, real-time Web pages can be created. Using the above-mentioned **custom UI components**, dynamic Web pages can also be created.

Sun's Java language has emerged as an...a schematic illustration of the relationship between areas of core competence of both 1 5 **operators** and manufacturers for creating an environment for new business relationships in accordance with an embodiment...level. Although data communication between DCEs of the network is routinely handled by the network **operator** typically using techniques other than X.25, communication between the individual user system and the...scales MNS assets to address carrier network management in a data networking world. This solution **template** enables the convergence of circuit and packet switching network control centers and workforces.

The present...element managers is utilized by the information services manager to provide information to the network **operators**. The information services manager adheres to CORBA standards to provide ubiquitous information access via an...logging calls.

Software and Assets

Managed Networked Services Integrated Solution- The integrated network management solution **template** consists of a suite of best of breed third party software products that automate problem...a browser based tool that provides the personalized SLA reports to customers in both a **template** and ad-hoc format.

Data Mining Demonstration - Provides the capability to analyze network management

data...quality management, program planning and management tool-kits.

Service Consolidation and Optimization

As the network **operator** moves into operating and maintaining the "NGN", there will be many parallel market driven journeys...CDR), Expanded Call Detail Record (ECDR), Private Network Record (PNR), Expanded Private Network Record (EPNR), **Operator** Service Record (OSR), Expanded **Operator** Service Record (EOSR), Private **Operator** Service Record (POSR), Expanded Private **Operator** Service Record (EPOSR), and Switch Event Record (SER). Each record is 32 words in length...and POSR, and thereby the EOSR and EPOSR, contain information regarding a telephone call requiring **operator** assistance and are generated at switches or systems actually equipped with **operator** positions. A switch completes an OSR for a non- VNET customer and completes a POSR... records are only generated at switches or systems that have the capability of performing **operator** services or network audio response system (NARS) functions. The formats of the two (2) records... must be translated to another number within the network. Therefore, when a caller uses an **operator** service, the switch 12061210 records the dialed numbers in expanded record (EOSR, EPOSR) 3616.

In... if the pre-translated digits of a call 3602 as dialed by a caller without **operator** assistance has more than ten (10) digits. If there are more than ten (10) pre... switch 1206-1210 determines if the time and charges feature was used by an **operator**. The time and charges feature is typically used in a hotel scenario when a hotel guest makes a telephone call using the **operator's** assistance and charges the call 3602 to her room. After the call 3602 has completed, the **operator** informs the hotel guest of the charge, or cost, of the call 3602. If the... a value of -21,600 (-1* 360 minutes* 60 seconds/minute = -21,600 seconds). Using equation (ii) from above, if the local switch time were midnight, the corresponding epoch time might Time and the Time Offset. In Figure 38, after a switch **operator** enters the Change Time command, the switch enters step 3802 and prompts the switch **operator** for the Local Switch Time and Time Offset from UTC. In step 3802 the switch **operator** enters a new Local Switch Time and Time Offset. Continuing to step 3804, the new time and Time Offset are displayed back to the switch **operator**. Continuing to step 3806, the switch **operator** must verify the entered time and Time Offset before the actual time and offset are changed on the switch. If in step 3806 the switch **operator** verifies the changes, the switch proceeds to step 3808 and generates a SER with an... command which is the second command for changing time. In Figure 39, after a switch **operator** enters the Change Daylight Savings Time command, the switch enters step 3902 and prompts the switch **operator** to select either a Forward or Backward time change. Continuing to step 3904, the switch **operator** makes a selection. In step 3904, if the switch **operator** selects the Forward option, the switch enters step 3906. In step 3906, the switch sets... The switch then proceeds to step 3910. Referring back to step 3904, if the switch **operator** selects the Backward option, the switch sets the Local Switch Time back one hour and... Offset. The switch then proceeds to step 3910.

15

In step 3910, the switch **operator** must verify the forward or backward option and the new Local Switch Time and Time Offset before the actual time change takes place. If in step 3910, the switch **operator** verifies the new time and Time Offset, the switch proceeds to step 3912 and generates... to step 3914 and exits the command. Referring back to step 3910, if the switch **operator** does not verify the changes, the switch proceeds to step 3914 and exits

the command...Accordance
With A Preferred Embodiment

In today's telephony environment, a caller must contact an **operator** to initiate ...common number to connect into a conference call. This requires the cost of a human **operator** and the inconvenience of dialing a predefined number to be carried as overhead of each... ..could be joined without intervention of the calling party, Internet callers are supported and an **operator** can be Joined as required.

Before describing this aspect of the present invention, a description...voice capability, and can initiate a video screen popup on the computer display for manual **operator** assistance as detailed above in the description of a video **operator**.

Self-Regulating System

An expert system monitors each call in accordance with a preferred embodiment... ..PSTN or the internet. In addition, the system includes a default connection to a manual **operator** if no other correction of the connection is available.

For example, if a caller hangs...the events from the packet infrastructure with the Core circuitbased network events to provide the **operators** with a seamless service oriented view of the overall health of the network;
2. Event...a number of event lists and views, all of which are highly customizable by each **operator**.

Notification Spooler 4622 - A **custom** provided sub-**component** which spools 'ob-files that which events have occurred for possible notifications.

speci I

Spooled... ..is stored as a file in a special notification spool directory.

Notification Actor 4626 - A **custom** provided sub-**component** which determines the alert time, source node, and alert type from the loaded spooled job...element managers is utilized by the information services manager to provide information to the network **operators**. The information services manager adheres to CORBA standards to provide ubiquitous information access via... ..the alarm in the operational database and then forward the alarm to the appropriate network **operator**. 1 5 Media and textual databases are also provided by the information services manager. The...asked a series of questions by an interactive voice response (IVR) system or an live **operator**. The customer uses Touch-Tone keys on the telephone to respond to these queries from the IVR, or responds normally to a live **operator**.

When a product support engineer becomes available, the previously gathered information (both from the IVR...features such as an electronic commerce component 5300, a content channels component 5302, an administrative **component** 5304, a customer relationship management component 5306, a content management and publishing services component 5308...configurability which can be shaped by WAF participants, through the use, for example, of WAF **templates**, to employ specific capabilities, along, for example, with capability parameter data to reflect the elements...that the needs of the user are assessed by receiving input from the user.

PRODUCT CONFIGURATOR

Lists all the options related to a product or service
Allows users to piece together...group.

The Lotus Notes Application Development Environment provides for such features as (i) application design **templates** which are said to allow sophisticated applications to be built by customizing pre-built applications...would communicate with each other to develop pricing and confirm transactions. This process employed the **expression** by the representatives of various bid and offer prices f@r the fixed income security... ..select volumes (i.e., how many million dollars of bonds at a given maturity). This **expression** The many pen-nutations of this process will be discussed in some detail below. At...6610 while incoming electronic mail is manage and organized in operation 6612. A plurality of

templates are provided for publishing data in various forms in operation 6614.

Options include monitoring a... ..received electronic mail could be stored in a dynamic customer interaction database. The plurality of **templates** for publishing data in various forms may include **templates**

191

below.

DOWNLOAD CAPABILITIES

Provides common process for all downloads

Downloads selected files securely

Tracks...multiple data sources: static, database, third party site

Matches content to users via configurable business **rules**

Allows **custom template** based publishing

The content channels component of the present invention also provides for generic and custom **template** based publishing by displaying selected content and applications based on the profile of a user...

Claims:

...59 EAC5 EAC6 EAC7 EAC8

60 EAC9 EACIO EAC11 EAC1261 OPIN JOVFC562 TP5-**OPERATOR** RELEASE63
RN1 -F-R&2 I RN3 RN4BIT 00 01 02 03 04... ..363602 CALL3702 37043700ME
ANDCHARGE FEATUDEBANUSED BY CCALL **OPERATOR**?NO NON 0 YESIFUSE
CDR PNR USE ECDR/EPNR USE OSR, POSR... ..EOSRJRERECORD WbRMAT
RECORD FORMAT RECORD RECORD FO'.FORMAT3708 -3710Figure 37PROMPT
SWITCH**OPERATOR** FOR 3802LOCAL SWITCH TIMEANDTIME OFFSET
FROMTCYISIlrDISPLAY ENTERED 3804TIME AND TIMEOFFSET BACK
TOSWITCH **OPERATOR**3806SWITCH 3810@OOPERA'I R.RIFIED ENTERE NO
EXITTIME AND TIMEOFFSET?sIlrGENERATE SER 3808WITH EVENTQUALIFIER =
2Figure 3838/130PROMPT SWITCH**OPERATOR** FOR 3902FORWARD
ORBACKWARD TIMECHANGE ...WorkflowCompare Products I Cnlet Subs.-: c d E
Eing ActServices Capabilides(phy cal (**template** base Surveys'sra"s2ec1e.,cE@nicF'sss'rl I O
'es publishina)Events, Calenciaring &I ntent...THE TRANSMISSION OF
ELECTRONIC MAIL 66106612ORGANIZING RECEIVED ELECTRONIC
MAIL.PROVIDING A PLURALITY OF **TEMPLATES** FOR PUBLISHING DATA IN

VARIOUS FORMS5302Figure 6666/130A'7 n...j10202DCA1STATIC
CONTENTDYNAMICCONTENTAREAS10204DCA210206DCA3Figure 102HTML
TEMPLATE95/130MONITORING OPERATION OF ENTITIES SELECTED FROM THE
10402GROUP CONSISTING OF SERVER PROCESSES...

6/K/6 (Item 5 from file: 349) [Links](#)

Fulltext available through: [Order File History](#)

PCT FULLTEXT

(c) 2009 WIPO/Thomson. All rights reserved.

	Country	Number	Kind	Date
Patent				19

Detailed Description:

...5 is a schematic illustration of the relationship between areas of core competence of both **operators** and manufacturers for creating an environment for new business relationships in accordance with an embodiment...that can be used to manage an enterprise's content; Figure 102 illustrates an exemplary **template** with three Dynamic Content Areas (DCAs) embedded within the **template** in accordance with a method of associating a rule and content to an interaction,

Figure...wide variety of user interface components.

With Java, developers can create robust User Interface (UI) **components**. **Custom** "widgets" (e.g., real-time stock tickers, animated icons, etc.) can be created, and client...for improved performance. Dynamic, real-time Web pages can be created. Using the above-mentioned **custom UI components**, dynamic Web pages can also be created.

Sun's Java language has emerged as an...5 is a schematic illustration of the relationship between areas of core competence of both **operators** and manufacturers for creating an environment for new business relationships in accordance with an embodiment...level. Although data communication between DCEs of the network is routinely handled by the network **operator** typically using techniques other than X.25, communication between the individual user system and the...scales MNS assets to address carrier network management in a data networking world. This solution **template** enables the convergence of circuit and packet switching network control centers and workforces.

The present...element managers is utilized by the information services manager to provide information to the network **operators**. The information services manager adheres to CORBA standards to provide ubiquitous information access via...the alarm in the operational database and then forward the alarm to the appropriate network **operator**.

52

Media and textual databases are also provided by the information services manager. The databases...Tier 3 - are considered solution experts and often consist of hardware vendors, software vendors or **custom** application development / maintenance teams (indepth skills needed to investigate and resolve difficult problems within their...logging calls.

Software and Assets

Managed Networked Services Integrated Solution- The integrated network management solution **template** consists of a suite of best of breed third party software products that

54

automate problem diagnosis, notification, custom-developed reporting, and IP services

monitoring. This solution **template** is a great first step in realizing our technology solution vision.

Web-Based SLA Reporting... [...a browser based tool] that provides the personalized SLA reports to customers in both a **template** and ad-hoc format.

Data Mining Demonstration - Provides the capability to analyze network management data...quality management, program planning and management tool-kits.

Service Consolidation and Optimization

As the network **operator** moves into operating and maintaining the "NGN", there will be many parallel market driven journeys...capability of using the general public network as well as the capability of defining a **custom** virtual network (VNet).

With a VNet, a customer defines a private dialing plan, including plan... [...allocated to a public telecommunication system dedicated to a specific geographic region, but can define **custom** telephone numbers.

Upon processing a telephone call, a switch must generate a call record large...CDR), Expanded Call Detail Record (ECDR), Private Network Record (PNR), Expanded Private Network Record (EPNR), **Operator** Service Record (OSR), Expanded **Operator** Service Record (EOSR), Private **Operator** Service Record (POSR), Expanded Private **Operator** Service Record (EPOSR), and Switch Event Record (SER). Each record is 32 words in length...and POSR, and thereby the EOSR and EPOSR, contain information regarding a telephone call requiring **operator** assistance and are generated at switches or systems actually equipped with **operator** positions. A switch completes an OSR for a non- VNET customer and completes a POSR... [...These records are only generated at switches or systems that have the capability of performing **operator** services or network audio response system (NARS) functions. The forinats of the two (2) records... [...if the pre-translated digits of a call 3602 as dialed by a caller without **operator** assistance has more than ten (10) digits. If there are more than ten (10...a switch 1206-1210 determines if the time and charges feature was used by an **operator**. The time and charges feature is typically used in a hotel scenario when a hotel guest makes a telephone call using the **operator**'s assistance and charges the call 3602 to her room. After the call 3602 has completed, the **operator** informs the hotel guest of the charge, or cost, of the call 3602. If the...a value of -21,600 (-1* 360 minutes* 60 seconds/minute = -21,600 seconds). Using **equation** (11) from above, if the local switch time were midnight, the corresponding epoch time might... [...changes the Local Switch Time and the Time Offset. In Figure 38, after a switch **operator** enters the Change Time command, the switch enters step 3802 and prompts the switch **operator** for the Local Switch Time and Time Offset from UTC. In step 3802

86

the switch **operator** enters a new Local Switch Time and Time Offset. Continuing to step 3804, the new time and Time Offset are displayed back to the switch **operator**. Continuing to step 3806, the switch **operator** must verify the entered time and Time Offset before the actual time and offset are changed on the switch. If in step 3806 the switch **operator** verifies the changes, the switch proceeds to step 3808 and generates a SER with an... [...to step 3810 and exits the command. Referring back to step 3806, if the switch **operator** does not verify the changes, the switch proceeds to step 3810 and exits the command... [...command which is the second command for changing time. In Figure 39, after a switch **operator** enters the

Change Daylight Savings Time command, the switch enters step 3902 and prompts the switch **operator** to select either a Forward or Backward time change. Continuing to step 3904, the switch **operator** makes a selection. In step 3904, if the switch **operator** selects the Forward option, the switch enters step 3906. In step 3906, the switch sets... ..The switch then proceeds to step 3910. Referring back to step 3904, if the switch **operator** selects the Backward option, the switch sets the Local Switch Time back one hour and... ..Time Offset. -The switch then proceeds to step 3910.

In step 3910, the switch **operator** must verify the forward or backward option and the new Local Switch Time and Time Offset before the actual time change takes place. If in step 3910, the switch **operator** verifies the new time and Time Offset, the switch proceeds to step 3912 and generates... ..to step 3914 and exits the command. Referring back to step 3910, if the switch **operator** does not verify the changes, the switch proceeds to step 3914 and exits the command... ..Accordingance

With A Preferred Embodiment

In today's telephony environment, a caller must contact an **operator** to initiate a conference call and/or have all parties dial a common number to connect into a conference call. This requires the cost of a human **operator** and the inconvenience of dialing a predefined number to be carried as overhead of each... ..could be joined without intervention of the calling party, Internet callers are supported and an **operator** can be joined as required.

Before describing this aspect of the present invention, a description...screen popup on the computer

ut wi I I I I I I

display for manual **operator** assistance as detailed above in the description of a video **operator**.

Self-Regulating System

An expert system monitors each call in accordance with a preferred embodiment... ..PSTN or the internet. In addition, the system includes a default connection to a manual **operator** if no other correction of the connection is available.

For example, if a caller hangs... ..events from the packet infrastructure with the Core circuit-based network events to provide the **operators** with a seamless service oriented view of the overall health of the network;

2. Event...a number of event lists and views, all of which are highly customizable by each **operator**.

Notification Spooler 4622 - A **custom** provided sub-**component** which spools job-files that ify which events have occurred for possible notification
speci I... ..stored as a file in a special notification spool directory.

112

Notification Actor 4626 - A **custom** provided sub-**component** which determines the alert time, source node, and alert type from the loaded spool... ..element managers is utilized by the information services manager to provide information to the network **operators**. The information services manager adheres to CORBA standards to provide ubiquitous information access via... ..the alarm in the operational database and then forward the alarm to the appropriate network **operator**.

Media and textual databases are also provided by the information services manager. The databases includes...asked a series of questions by an interactive voice response (IVR) system or an live **operator**. The customer uses Touch-Tone keys on the telephone to respond to these queries from the IVR, or responds normally to a live **operator**.

When a product support engineer becomes available, the previously gathered information (both from the IVR...configurability which can be shaped by WAY participants, through the use, for example, of WAF **templates**, to employ specific capabilities, along, for example, with capability parameter data to reflect the elements...The comparison between different products and services could include a comparison to a competitor's **product**. Alternatively, the comparison between different products and services could include identification of at least one...that the needs of the user are assessed by receiving input from the user.

PRODUCT CONFIGURATOR

Lists all the options related to a product or service

Allows users to piece together...advantage that it does not require specialpurpose software to be installed on the customer's **computer** because it is already incorporated into widely available software that many people utilize as their...group.

The Lotus Notes Application Development Environment provides for such features as (i) application design **templates** which are said to allow sophisticated applications to be built by customizing pre-built applications...Such information -may include identification information such as name, address, etc. In operation 6408, a **tailored** license agreement is then generated by utilizing the user input.

Figure 65 illustrates a procedure...

Claims:

...EAC6 EAC7 EAC8
60 EAC9 EACIO EAC1 1 EAC1261 OPIN I OVFS62 TP5-**OPERATOR** RELEASE63
RN1 RN2 RN3 RN4BIT 00 01 02 03 04 05 06 07... ..RECORD FORMAT RECORD
FORMAT RECORD RECORDYFORMAT3708 37 loFigure 37IFPROMPT
SWITCH**OPERATOR** FOR 3802LOCAL SWITCH TIMEANDTIME OFFSET
FROMUTCYISILrDISPLAY ENTERED 3804TIME AND TIMEOFFSET BACK
TOSWITCH **OPERATOR**3806SWITC 3810OPERAROIREFIED ENTERE NO EXITIME
AND TIMEOFFSET?Y SGENERATE SER 3808WITH EVENTQUALIFIER = 2Figure
38PROMPT SWITCH**OPERATOR** FOR 3902FORWARD ORBACKWARD
TIMECHANGE3904FORWARD 0 BACKWARDKWA TI3906 HANGE...THE
TRANSMISSION OF ELECTRONIC MAIL 66106012ORGANIZING RECEIVED
ELECTRONIC MAILPROVIDING A PLURALITY OF **TEMPLATES** FOR
PUBLISHING DATA IN VARIOUS 14FORMS5302Figure 66MANAGING PROFILE
DATA OF A...Lu < zw 0QzINTENT MERGE 0∓ DELIVERY 1090 PRODUCTS
GRAPHICS971INTERAC710M **TEMPLATES**97189720Figure 989902 9904
9910ITERATIVE ITERATIVEIDENTIFYMINFORMATION XcNcCAPTURE...

...DCASTATIC CONTENTDYNAMICCONTENTAREAS1 0204DCA2J
10206DCA3Figure 102HTML. **TEMPLATE**MONITORING OPERATION OF ENTITIES
SELECTED FROM THE 10402GROUP CONSISTING OF SERVER PROCESSES, DISK -
SPACE...

6/K/7 (Item 6 from file: 349) [Links](#)

Fulltext available through: [Order File History](#)

PCT FULLTEXT

(c) 2009 WIPO/Thomson. All rights reserved.

	Country	Number	Kind	Date
Patent				19

Detailed Description:

...developers to rapidly deliver enterprise-class web applications.

0 Extension Builder - allows corporations to develop **custom** integration with heterogeneous systems and applications across the enterprise.

Business2 Director A directory server that...wide variety of user interface components.

With Java, developers can create robust User Interface (UI) **components**. **Custom** "widgets" (e.g., real-time stock tickers, animated icons, etc.) can be created, and client... ...for improved performance. Dynamic, real-time Web pages can be created. Using the above-mentioned **custom** UI **components**, dynamic Web pages can also be created.

Sun's Java language has emerged as an...the network

New development software

New releases of existing development software

New releases of infrastructure **components** (**custom**-built technology architecture)

The release of these components into the environment requires very careful planning...
...environment.

0 One or more separate architecture build and test environments where new or modified **custom**-built **components** can be thoroughly verified before they are made available.

78

In addition to reducing risk...architecture (data access components and firewalls). The process involves a number of stages.

Package or **Component** Selection

Component Customization

Component Interfacing

85

Standards and Procedures

A proven practice in the component-based development world, when...an integrated development environment tool by a menu with the following choices.

0 Generate module **template**

0 Generate windows and dialogs

0 Edit code

0 Compile

0 Link

0 Edit test...application development repository. The various tools employed in the development environment are bridged together by **custom architecture components**. This approach is commonly used when the Engagement team takes a best of breed approach...and Collaborations Diagrams complement the model.

Component Modeling

Component modeling can mean either designing **components** from scratch, or **customizing** and integrating packaged software. No specific component modeling tools exist, and current object modeling...Logic Design tool or purchase an existing one?

Engagement teams must determine whether standard design **templates** provided by vendors meet project needs, or if the architecture must provide custom solutions. CASE...132)

Packaged components are generally third party components that provide ready-made business logic that is **customizable** and reusable. These can range from simple components offering limited functionality (for example, worksheet or... ..components for the Java environment (see Error! Bookmark not defined.)

Product Considerations

a) Does the **component** require significant **customization**?

When selecting **components**, it is important to get as close a match as possible to the functionality that... ..packaged components, always choose standard interfaces over proprietary ones. It will always be easier to **customize** and interface a **component** whose language is known to the development team, rather than one which requires developers to learn a new proprietary language.

Customization

Packaged **components** usually do not provide the exact functionality that is required of the target system because...selects the appropriate include files and creates skeleton code which may be used as a **template** for the programmer. This **template** may also include audit history for the module and standard code such as error handling... ..team. Most generators are usually custom built because often the technical environment and architecture have **custom components** that cannot be handled by a package generator. Associated with custom building are the issues...and the external tools must be provided by a judiciously chosen set of procedures and **custom** integration tools.

Component-based development may have an impact on the way in which testing should be performed...environment but are not in the development environment. These emulation tools include.

Target platform architecture **components**, including both **custom** infrastructure and system software products such as an X-window emulator on a PC to...and must be built into the requirements.

Assess incidents automatically, based on previous experience and **rules**

Knowledge and case based incident management systems are becoming prevalent in the

market place, and...across platforms, and multiple time zones may be involved. In addition, many non-mainframe based **products** do not provide production scheduling capabilities with the platform. Therefore, one can see that scheduling...

Claims:

...c,--- -P.-d. /I I-TwmBwF@-@--d Uynarric mandennng I 4UEi6QCF`a11o1w1@p
I sairwim (**temPlate** based F&4@z-lorner @Feeedback r--UWW9UP@0F@" publishina)
sum"Buyer Aseloard--- F...TRANSMISSION OF ELECTRONIC MAIL
22102212ORGANIZING RECEIVED ELECTRONIC MAIL4PROVIDING A PLURALITY
OF **TEMPLATES** FOR PUBLISHING DATA IN VARIOUSFORMS1402Figure
22PROVIDING INFORMATION OF INTEREST TO EACH...

6/K/8 (Item 7 from file: 349) [Links](#)

Fulltext available through: [Order File History](#)

PCT FULLTEXT

(c) 2009 WIPO/Thomson. All rights reserved.

	Country	Number	Kind	Date
Patent				19

Detailed Description:

...objects. A host of

Productl Java classes and methods are available out-of-thebox for **custom** development.

Product I Command Center -a Jdva-based

application that provides local and remote management and monitoring...and

rapid customization of a site's business processes through

modifiable business rules and presentation **templates**.

Search capabilities, including hierarchical

menus, parametric searches by attribute, and simple

keyword searches.

BillerProductl - An...wide variety of user interface components.

With Java, developers can create robust User Interface (UI) **components**. **Custom** "widgets"

(e.g., real-time stock tickers, animated icons, etc.) can be created, and clientside... ...for improved performance.

Dynamic, real-time Web pages can be created. Using the above-mentioned **custom** UI **components**, dynamic Web pages can also be created.

Sun's Java language has emerged as an...key considerations when managing these packages.

Note that version control not only applies to software **components**, but also to all

components of a given package, including test scripts, test data, and design documentation.

It is also...the network

New development software

New releases of existing development software

New releases of infrastructure **components** (**custom**-built technology

architecture)

The release of these components into the environment requires very careful planning... ...the environment.

" One or more separate architecture build and test environments where new or modified **custom**-built **components** can be thoroughly verified before they are made available.

In addition to reducing risk, testing...architecture (data access components and firewalls). The

process involves a number of stages.

Package or **Component** Selection

Component Customization

Component Interfacing

Standards and Procedures

A proven practice in the component-based development world, when dealing...within an integrated development environment tool by a menu with the following choices.

Generate module **template**

Generate windows and dialogs

Edit code

Compile

Link

Edit test plan

Generate testdata

Execute test...application development repository. The various tools employed in the development environment are bridged together by **custom** architecture **components**. This approach is commonly used when the Engagement team takes a best of breed approach...that may or may not agree.

Measurement tools are used to measure process quality and **product** quality.

Process quality may include Metrics such as the time it takes to process a...Jacobson) and Collaborations Diagrams complement the model.

Component Modeling

Component modeling can mean either designing **components** from scratch, or **customizing** and integrating packaged software. No specific component modeling tools exist, and current object modeling tools...Design tools may not be required.

Product Considerations

a) Should the engagement team build a **custom** Application Logic Design tool or purchase an existing one?

Engagement teams must determine whether standard design **templates** provided by vendors meet project needs, or if the architecture must provide custom solutions. CASE...components for the Java environment (see Error! Bookmark not defined.)

Product Considerations

a) Does the **component** require significant **customization**?

When selecting **components**, it is important to get as close a match as possible to the functionality that... packaged components, always choose standard interfaces over proprietary ones. It will always be easier to **customize** and interface a **component** whose language is known to the development team, rather than one which requires developers to learn a new proprietary language.

Customization

Packaged **components** usually do not provide the exact functionality that is required of the target system because...selects the appropriate include files and creates skeleton code which may be used as a **template** for the programmer. This **template** may also include audit history

...team. Most generators are usually custom built because often the technical environment and architecture have **custom components** that cannot be handled by a package generator. Associated with custom building are the issues...repository and the external tools must be provided by a judiciously chosen set of procedures and **custom** integration tools.

Component-based development may have an impact on the way in which testing should be performed...but are not in the development environment. These emulation tools include.

0 Target platform architecture **components**, including both **custom** infrastructure and system software products such as an X-window emulator on a PC to...

Claims:

...nt R

Assists nt Registr 0 Te:Ung ;;@:W. & Needs Assessm F FADSP Product **Configurator**

Order Status I OrderL History Administrative Shareholder S 0 31

TranAdv:rti38mant,&...L..TRANSMISSION OF ELECTRONIC MAIL

22102212ORGANIZING RECEIVED ELECTRONIC MAILPROVIDING A PLURALITY

OF **TEMPLATES** FOR PUBLISHING DATA IN VARIOUS ZZ14FORMS1402Figure

22MANAGING PROFILE DATA OF A...

6/K/9 (Item 8 from file: 349) [Links](#)

Fulltext available through: [Order File History](#)

PCT FULLTEXT

(c) 2009 WIPO/Thomson. All rights reserved.

	Country	Number	Kind	Date
Patent				19

Detailed Description:

...status information.

Payment systems, catalog creation and administration tools, an order management system, and rapid **customization** of a site's business processes through modifiable business rules and presentation **templates**.

Search capabilities, including hierarchical menus, parametric searches by attribute, and simple keyword searches.

BillerProductI - An...wide variety of user interface components.

With Java, developers can create robust User Interface (UI) **components**. **Custom** "widgets" (e.g., real-time stock tickers, animated icons, etc.) can be created, and client-side... for improved performance.

Dynamic, real-time Web pages can be created. Using the above-mentioned **custom UI components**, dynamic Web pages can also be created.

Sun's Java language has emerged as an...the network

New development software

New releases of existing development software

New releases of infrastructure **components** (**custom-built** technology architecture)

70

The release of these components into the environment requires very careful...the environment.

" One or more separate architecture build and test environments where new or modified **custom-built components** can be thoroughly verified before they are made available.

In addition to reducing risk, testing...application development repository. The various tools employed in the development environment are bridged together by **custom** architecture **components**. This approach is commonly used when the Engagement team takes a best of breed approach...and

131

Collaborations Diagrams complement the model.

Component Modeling

Component modeling can mean either designing **components** from scratch, or **customizing** and integrating packaged software. No specific component modeling tools exist, and current object modeling tools...Logic Design tool or purchase an existing one?

Engagement teams must determine whether standard design **templates** provided by vendors meet project needs, or if the architecture must provide custom solutions. CASE...components for the Java environment (see Error! Bookmark not defined.)

Product Considerations

a) Does the **component** require significant **customization**?

When selecting **components**, it is important to get as close a match as possible to the functionality that... ..enhancements?

If functionality is missing from a component that cannot be added using the standard **customization** tools provided, it is vital to get a vendor guarantee that the enhancements will be... ..packaged components, always choose standard interfaces over proprietary ones. It will always be easier to **customize** and interface a **component** whose language is known to the development team, rather than one which requires developers to learn a new proprietary language.

Customization

Packaged **components** usually do not provide the exact functionality that is required of the target system because...selects the appropriate include files and creates skeleton code which may be used as a **template** for the programmer. This **template** may also include audit history for the module and standard code such as error handling... ..team. Most generators are usually custom built because often the technical environment and architecture have **custom components** that cannot be handled by a package generator. Associated with custom building are the issues...repository and the external tools must be provided by a judiciously chosen set of procedures and **custom** integration tools.

Component-based development may have an impact on the way in which testing should be performed...environment but are not in the development environment. These emulation tools include.

" Target platform architecture **components**, including both **custom** infrastructure and system software products such as an X-window emulator on a PC to...

Claims:

...gistr :nt R;v
\$\$againBuyer Assist@.nt Re ratioari T ling 0io"IsProduct **Configurator** Order Status I Ord
Localization II I History Administrative Shareholder Services Tran ale tion...OF
ELECTRONIC MAIL 22102212ORGANIZING RECEIVED ELECTRONIC MAIL I
2214PROVIDING A PLURALITY OF **TEMPLATES** FOR PUBLISHING DATA IN
VARIOUSFORMS1402Figure 22MANAGING PROFILE DATA OF A PLURALITY...

6/K/10 (Item 9 from file: 349) [Links](#)

Fulltext available through: [Order File History](#)

PCT FULLTEXT

(c) 2009 WIPO/Thomson. All rights reserved.

	Country	Number	Kind	Date
Patent				19

Detailed Description:

...and

rapid customization of a site's business processes through
modifiable business rules and presentation **templates**.

Search capabilities, including hierarchical
menus, parametric searches by attribute, and simple
keyword searches.

BillerProductI - An...wide variety of user interface components.

With Java, developers can create robust User Interface (UI) **components**. **Custom** "widgets"
(e.g., real-time stock tickers, animated icons, etc.) can be created, and clientside ...for
improved performance.

Dynamic, real-time Web pages can be created. Using the above-mentioned **custom UI**
components, dynamic Web pages can also be created.

Sun's Java language has emerged as an...required integration between to design and
construction. A more subtle one is the integration of **product** quality inspection and the
continuous improvement process.

As process integration frequently involves several teams, it...the network

New development software

New releases of existing development software

New releases of infrastructure **components** (**custom**-built technology
architecture)

69

The release of these components into the environment requires very careful...the
environment.

* One or more separate architecture build and test environments where new or modified
custom-built components can be thoroughly verified before they are made available.

In addition to reducing risk, testing...architecture (data access components and firewalls). The
process involves a number of stages.

Package or **Component** Selection

Component Customization

0 **Component** Interfacing Standards and Procedures

A proven practice in the component-based development world, when dealing...application development repository. The various tools employed in the development environment are bridged together by **custom** architecture **components**. This approach is commonly used when the Engagement team takes a best of breed approach...and
130

Collaborations Diagrams complement the model.

Component Modeling

Component modeling can mean either designing **components** from scratch, or **customizing** and integrating packaged software. No specific component modeling tools exist, and current object modeling tools...Logic Design tool or purchase an existing one?

Engagement teams must determine whether standard design **templates** provided by vendors meet project needs, or if the architecture must provide custom solutions. CASE...components for the Java environment (see Error! Bookmark not defined.)

Product Considerations

a) Does the **component** require significant **customization**?

When selecting **components**, it is important to get as close a match as possible to the functionality that...packaged components, always choose standard interfaces over proprietary ones. It will always be easier to **customize** and interface a **component** whose language is known to the development team, rather than one which requires developers to learn a new proprietary language.

Customization

Packaged **components** usually do not provide the exact functionality that is required of the target system because... necessary to include vendor developers on the Application team. This is

149

especially important where **component custom** ization relies on proprietary toolkits.

Construction (134)

Construction tools are used to program or build...selects the appropriate include files and creates skeleton code which may be used as a **template** for the programmer. This **template** may also include audit history for the module and standard code such as error handling...components that will benefit most from the tool.

b) Should the engagement team build a **custom** generation tool or purchase an existing one?

The decision to custom build or to buy... team. Most generators are usually custom built because often the technical environment and architecture have **custom components** that cannot be handled by a package generator. Associated with custom building are the issues...repository and the external tools must be provided by judiciously chosen set of procedures and **custom** integration tools.

Component-based development may have an impact on the way in which testing should be performed...environment but are not in the development environment. These emulation tools include.

Target platform architecture **components**, including both **custom** infrastructure and system software products such as an X-window emulator on a PC to...of tools to support the individual functions.

Is the intention to use tools or to **custom** develop some or all of the./unctions? The choice of tools in the marketplace is...

Claims:

...TRANSMISSION OF ELECTRONIC MAIL 2210
2212ORGANIZING RECEIVED ELECTRONIC MAIL :2214PROVIDING A
PLURALITY OF **TEMPLATES** FOR PUBLISHING DATA IN
VARIOUSFORMS1402Figure 22MANAGING PROFILE DATA OF A PLURALITY...

6/K/11 (Item 10 from file: 349) [Links](#)

Fulltext available through: [Order File History](#)

PCT FULLTEXT

(c) 2009 WIPO/Thomson. All rights reserved.

	Country	Number	Kind	Date
Patent				19

Detailed Description:

...objects. A host of
ProductI Java classes and methods are available out-of-thebox for **custom** development.

Product I Command Center - a Java-based
application that provides local and remote management and
monitoring...and
rapid customization of a site's business processes through
modifiable business rules and presentation **templates**.

Search capabilities, including hierarchical
menus, parametric searches by attribute, and simple
keyword searches.

BillerProductI - An...wide variety of user interface components.

With Java, developers can create robust User Interface (UI) **components**. **Custom** "widgets"
(e.g., real-time stock tickers, animated icons, etc.) can be created, and clientside... ...for
improved performance.

Dynamic, real-time Web pages can be created. Using the above-mentioned **custom** UI
components, dynamic Web pages can also be created.

Sun's Java language has emerged as an...the network
New development software
New releases of existing development software
New releases of infrastructure **components** (**custom**-built technology
architecture)
The release of these components into the environment requires very careful planning...
...environment.

0 One or more separate architecture build and test environments where new or modified
custom-built **components** can be thoroughly verified before they are made available.

71

In addition to reducing risk...an integrated development environment tool by a menu with the
following choices.

0 Generate module **template**

- 0 Generate windows and dialogs
- 0 Edit code
- 0 Compile
- 0 Link

0 Edit test...application development repository. The various tools employed in the development environment are bridged together by **custom** architecture **components**. This approach is commonly used when the Engagement team takes a best of breed approach...Collaborations Diagrams complement the model.

Component Modeling

1 5 Component modeling can mean either designing **components** from scratch, or **customizing** and integrating packaged software. No specific component modeling tools exist, and current object modeling tools...effort allows some preliminary assessment of skill sets.

m) Is there some uncertainty about the **product** to be used in construction?
Prototyping can allow the project team to validate the capabilities... ..short of project requirements. Use of such tools during prototyping allows some "qualification" of a **product's** true capabilities. Performance, compatibility with existing client infrastructure, etc., can be tested.

Use of...Logic Design tool or
purchase an existing one?

Engagement teams must determine whether standard design **templates** provided by vendors meet project needs, or if the architecture must provide custom solutions. CASE...components for the Java environment (see Error! Bookmark not defined.)

Product Considerations

a) Does the **component** require significant **customization**?

When selecting **components**, it is important to get as close a match as possible to the functionality that... ..components, always choose standard interfaces

149

over proprietary ones. It will always be easier to **customize** and interface a **component** whose language is known to the development team, rather than one which requires developers to learn a new proprietary language.

Customization

Packaged **components** usually do not provide the exact functionality that is required of the target system because...selects the appropriate include files and creates skeleton code which may be used as a **template** for the programmer. This **template** may also include audit history for the module and standard code such as error handling technical environment and architecture have **custom components** that cannot be handled by a package generator. Associated with **custom** building are the issues of added cost and development time, but performance can be closely...and the external tools must be provided by a judiciously chosen set of procedures and **custom** integration tools.

Component-based development may have an impact on the way in which testing should be performed...environment but are not in the development environment. These emulation tools include.

Target platform architecture **components**, including both **custom**

infrastructure and system software products such as an X-window emulator on a PC to...

Claims:

...THE TRANSMISSION OF ELECTRONIC MAIL 2210

2212ORGANIZING RECEIVED ELECTRONIC MAILPROVIDING A PLURALITY OF
TEMPLATES FOR PUBLISHING DATA IN VARIOUS 2214FORMS1402Figure

22PROVIDING INFORMATION OF INTEREST TO...

6/K/12 (Item 11 from file: 349) [Links](#)

Fulltext available through: [Order File History](#)

PCT FULLTEXT

(c) 2009 WIPO/Thomson. All rights reserved.

	Country	Number	Kind	Date
Patent				19

Detailed Description:

...and

rapid customization of a site's business processes through
modifiable business rules and presentation **templates**.

Search capabilities, including hierarchical
menus, parametric searches by attribute, and simple
keyword searches.

BillerProductI - An...wide variety of user interface components.

With Java, developers can create robust User Interface (UI) **components**. **Custom** "widgets"
(e.g., real-time stock tickers, animated icons, etc.) can be created, and clientside... ...for
improved performance.

Dynamic, real-time Web pages can be created. Using the above-mentioned **custom UI**
components, dynamic Web pages can also be created.

Sun's Java language has emerged as an...the network

New development software

New releases of existing development software

New releases of infrastructure **components** (**custom**-built technology
architecture)

70

The release of these components into the environment requires very careful... ...the
environment.

" One or more separate architecture build and test environments where new or modified
custom-built components can be thoroughly verified before they are made available.

In addition to reducing risk, testing...application development repository. The various tools
employed in the development environment are bridged together by **custom** architecture
components. This approach is commonly used when the Engagement team takes a best of
breed approach...provide a method of measuring (for example, sampling, testing, and
determining) whether a process or **product** meets a given criterion. With Metrics, different
stakeholders can agree that a product objectively meets...as operating systems and hardware
components.

Product Considerations

a) Should the engagement team build a **custom** configuration management tool or purchase an existing one?

An ...and

131

Collaborations Diagrams complement the model.

Component Modeling

Component modeling can mean either designing **components** from scratch, or **customizing** and integrating packaged software. No specific component modeling tools exist, and current object modeling tools...Logic Design tool or purchase an existing one?

Engagement teams must determine whether standard design **templates** provided by vendors meet project needs, or if the architecture must provide custom solutions. CASE...components for the Java environment (see Error! Bookmark not defined.)

Product Considerations

a) Does the **component** require significant **customization**?

When selecting **components**, it is important to get as close a match as possible to the functionality that... ..packaged components, always choose standard interfaces over proprietary ones. It will always be easier to **customize** and interface a **component** whose language is known to the development team, rather than one which requires developers to learn a new proprietary language.

Customization

Packaged **components** usually do not provide the exact functionality that is required of the target system because... ..necessary to include vendor developers on the Application team. This is

150

especially important where **component customization** relies on proprietary toolkits.

Construction (134)

Construction tools are used to program or build the...selects the appropriate include files and creates skeleton code which may be used as a **template** for the programmer. This **template** may also include audit history for the module and standard code such as error handling... ..team. Most generators are usually custom built because often the technical environment and architecture have **custom components** that cannot be handled by a package generator. Associated with custom building are the issues...and the external tools must be provided by a judiciously chosen set of procedures and **custom** integration tools.

Component-based development may have an impact on the way in which testing should be performed...environment but are not in the development environment. These emulation tools include.

* Target platform architecture **components**, including both **custom** infrastructure and system software products such as an X-window emulator on a PC to...

Claims:

...COORDINATING THE TRANSMISSION OF ELECTRONIC MAIL 2210
ORGANIZING RECEIVED ELECTRONIC MAIL PROVIDING A PLURALITY OF
TEMPLATES FOR PUBLISHING DATA IN VARIOUS FORMS 1402 Figure
22 MANAGING PROFILE DATA OF A PLURALITY...

6/K/13 (Item 12 from file: 349) [Links](#)

Fulltext available through: [Order File History](#)

PCT FULLTEXT

(c) 2009 WIPO/Thomson. All rights reserved.

	Country	Number	Kind	Date
Patent				19

Detailed Description:

...objects. A host of
Productl Java classes and methods are available out-of-thebox for **custom** development.

Product I Command Center -a Java-based
application that provides local and remote management and
monitoring...and
rapid customization of a site's business processes through
modifiable business rules and presentation **templates**.

Search capabilities, including hierarchical
menus, parametric searches by attribute, and simple
keyword searches,
BillerProductl - An...wide variety of user interface components.

With Java, developers can create robust User Interface (UI) **components**. **Custom** it widgets"
(e.g., real-time stock tickers, animated icons, etc.) can be created, and... ...for improved
performance.

Dynamic, real-time Web pages can be created. Using the above-mentioned **custom** UI
components, dynamic Web pages can also be created.

Sun's Java language has emerged as an...staffing flexibility.

When supporting specific kinds of repository analysis, the Repository Management team can
provide **custom** reports or ad hoc queries that satisfy particular needs.

Folder Management (104)

It is important...the network

New development software

New releases of existing development software

New releases of infrastructure **components** (**custom**-built technology
architecture)

70

The release of these components into the environment requires very careful... ...the
environment.

" One or more separate architecture build and test environments where new or modified
custom-built **components** can be thoroughly verified before they are made available.

In addition to reducing risk, testing...application development repository. The various tools employed in the development environment are bridged together by **custom architecture components**. This approach is commonly used when the Engagement team takes a best of breed approach...and

131

Collaborations Diagrams complement the model.

Component Modeling

Component modeling can mean either designing **components** from scratch, or **customizing** and integrating packaged software. No specific component modeling tools exist, and current object modeling tools...Logic Design tool or purchase an existing one?

Engagement teams must determine whether standard design **templates** provided by vendors meet project needs, or if the architecture must provide custom solutions. CASE...components for the Java environment (see Error! Bookmark not defined.)

Product Considerations

a) Does the **component** require significant **customization**?

When selecting **components**, it is important to get as close a match as possible to the functionality that... ..packaged components, always choose standard interfaces over proprietary ones. It will always be easier to **customize** and interface a **component** whose language is known to the development team, rather than one which requires developers to learn a new proprietary language.

Customization

Packaged **components** usually do not provide the exact functionality that is required of the target system because... ..in the desired fashion. The majority of packaged components allow one of two methods of **customization** - either by using standard construction tools (such as an editor and a C compiler), or... ..necessary to include vendor developers on the Application team. This is

150

especially important where **component customization** relies on proprietary toolkits.

Construction (134)

Construction tools are used to program or build the...selects the appropriate include files and creates skeleton code which may be used as a **template** for the programmer. This **template** may also include audit history for the module and standard code such as error handling... ..generators are usually custom built because often the I/O technical environment and architecture have **custom components** that cannot be handled by a package generator. Associated with **custom** building are the issues of added cost and development time, but performance can be closely...repository and the external tools must be provided by judiciously chosen set of procedures and **custom** integration tools.

Component-based development may have an impact on the way in which testing should be performed...but are not in the development environment. These emulation tools include.

0 Target platform architecture **components**, including both **custom** infrastructure and system software products such as an X-window emulator on a PC to...

Claims:

...THE TRANSMISSION OF ELECTRONIC MAIL 2210

2212ORGANIZING RECEIVED ELECTRONIC MAILPROVIDING A PLURALITY OF
TEMPLATES FOR PUBLISHING DATA IN VARIOUS 4FORMS1402Figure

22MANAGING PROFILE DATA OF A...

6/K/14 (Item 13 from file: 349) [Links](#)

Fulltext available through: [Order File History](#)

PCT FULLTEXT

(c) 2009 WIPO/Thomson. All rights reserved.

	Country	Number	Kind	Date
Patent				19

Detailed Description:

...uses bills of rules to obtain options for the configured parts and to generate the **custom** work orders. A bill of **rules** is a set of rules in a logic tree which control processing of data.

A...complete manufacturing planning and control system, such as is illustrated in FIGURE 1. The expert **configurator** 100 illustrated in FIGURE 1 incorporates the present invention. The expert **configurator** 100 interfaces the 35 customer service module 101 with the production control module 102 and... ..may incorporate the present invention without departing from the scope of the invention, The expert **configurator** 100 is initiated from 5 the customer service module 101 and may subsequently begin a process of receiving information. Based on this information, the expert **configurator** generates information necessary to generate custom work orders for the end item and lower-level items, and the expert **configurator** delivers this information to the production control module 102 and the materials management module 181... ..the end item and lower-level items.

While the present invention as embodied in expert **configurator** 100 is initiated by and receives information from customer service module 101, a customer service... ..The customer service module may have many additional features that are utilized by the expert **configurator** but are not essential nor required for any function of present invention.

FIGURE 2A shows a more detailed block diagram of a preferred embodiment of expert **configurator** 100.

Expert **configurator** 100 may be implemented as a knowledge-based system as illustrated by FIGURE-2A, A...by the system during the course of, among other things,

obtaining option values and generating **custom** work orders. The **rules** are designed to capture and represent the knowledge of experts so that the rules define... ..categories is a database type; "description" is a user-defined text description of the action **expressions**; "**expression**" itself refers to whether the **expression** type is syntax or non-syntax (text or screen); "length" indicates the allowable length of the **expression** in the preferred system to be entered by the user; "interpreted type" refers to the type of result, either alphanumeric, numeric, or logical (true-false), after the syntax **expression** has been interpreted; and "note" simply indicates any special considerations for the rule.

The rule... ..Order entry, pricing, manufacturing.

Interpreted Type: Logical

A Condition Rule normally does not have action **expressions**.

1991 ANDERSEN CONSULTING

All Rights Reserved

Table ...forward chaining process and initiates the explanation facility.

Valid Rule Categories.

order entry, pricing.

Action **Expression 1**.

Description: Rule type to trace, Identified by action code.

Expression

20. Type: Non-syntax (text),

Length: 25

Interpreted

Type: Not interpreted,

Note: This rule may contain up to eight action codes to be traced.

Action **Expression 2**.

Description: User-defined debug screen title, appears on the debug screen when it is displayed.

Expression

Type: Non-syntax (text),

Length: 25

Interpreted

Type: Not interpreted.

© 1991 ANDERSEN CONSULTING

All... ..statement, Normally, a

screen rule definition screen is used in place
of a condition and **expression** detail screen.

© 1991 ANDERSEN CONSULTING

All Rights Reserved

Table 4

CONFIGURED COMPONENT RULE

Explanation... ..the configured component identified
by the Configured Component Rule,
Valid Rule Categories.

Order entry,

Action **Expression 1**.

Description: Part number.

Expression

Type: Syntax,

Length: 320

Interpreted

Type: Alphanumeric.

Note: In the preferred system, the
part identified... ..be defined as a manufactured or
build-through part in the plant
identified in Action **Expression**
2; and, if the plant in Action
Expression 2 differs from the
plant or the rule, then this
part must also be defined as a
Transfer Part in the rules
plant.

Action **Expression 2**.

Description: Plant.

Expression

Type: Syntax,

Length: 320,

Interpreted

Type: Alphanumeric,

Note: This must be a valid plant.

C... ..the particular
item being configured by the preferred system.

Valid Rule Categories.

Order entry,
Action **Expression 1**.

Description: Error message to ...on
the user-defined option
selection screen when a screen
validation condition is
satisfied,

40 **Expression**

Type: Non-syntax (text),

Length: 55

45 Interpreted

Type: Not interpreted.

Note: In the preferred... ..typically is used for subsequent
rule processing.

Valid Rule Categories.

Order entry, mfg, pricing,
Action **Expression 1**.

Description: Option value to be modified,
Expression

Type: Non-syntax (text),

Length: 15

Note: Must be an existing option value
defined for a Process Screen

Generation Rule,

Action **Expression 2**.

Description: New value of the option.

Expression

Type: Syntax,

Length: 320

Interpreted

Type: If modifying an option, should
be identical to the... ..variable rule may be used as a Valid Rule Categories.

Order entry, pricing, manufacturing.

Action **Expression 1**.

Description: Name of the secondary variable.

Expression

Type: Non-syntax (text),

Length: 15

Interpreted

Type: Not interpreted.

Note: User-defined name for the secondary variable.

Action **Expression 2.**

Description: Value of the variable (work field).

Expression

40 Type: Syntax.

Length: 320

Interpreted

45 Type: Logical, alphanumeric, or numeric.

Note: The value... ..an end item and its configured components.

Valid Rule Categories.

Order entry, pricing, manufacturing.

Action **Expression 1.**

Description: Name of the global variable.

Expression

Type: Non-syntax (text),

Length: 15

Interpreted

Type: Not interpreted,

Note: User-defined name for the global variable.

Action **Expression 2.**

Description: Value of the variable (global **Expression**

Type: Syntax,

Length: 320

Interpreted

Type: Logical, alphanumeric, or numeric.

Note: The value entered may...detailed description of various price components of a product's price.

Valid Rule Categories.

Pricing.

Action **Expression 1.**

Size Name Descriptio
35 2 Sequence number User-defined
number used to
specify the... ..detail
is not associated
with an option
value, enter a
description of
the price-detail.

Expression

Type: Non-syntax,

Length: 30

Note: The segments of this **expression**
are preferably entered without
any separating spaces between
the segments,

Action **Expression 2.**

Description: Value of the price component,

Expression

Type: Syntax,

Length: 320

Interpreted

Type: Numeric.

Note: In the preferred embodiment, the
interpreted **expression** must
result in a positive number.

0 1991 ANDERSEN CONSULTING

All Rights Reserved

Table 10... ..finalized price into a database for the
preferred system,

Valid Rule Categories.

15 Pricing.

Action **Expression 1.**

Description: The value of the final price of the end item.

Expression

Type: Syntax,

Length: 320

Interpreted

Type: Numeric

Note: In the preferred embodiment, the interpreted **expression** must result in a positive number.

© 1991 ANDERSEN CONSULTING

All Rights Reserved

Table 11... ..used in building the lower-level items and end item,

Valid Rule Categories.

Manufacturing.

Action **Expression 1.**

Description: The usage code, scrap factor, and component part required for the manufacturing work... ..entered literally and cannot be interpreted. The component may be in the form of an **expression**,

Expression

Type: Syntax.

Length: 320

Interpreted

Type: Alphanumeric,

Note: This part must be on the Part Master File,

Action **Expression 2.**

Description: The quantity of the component part required to manufacture one configured parent part.

Expression

Type: Syntax,

Length: 320

Interpreted

Type: Numeric.

Note: The quantity must be a positive number operations required to construct a configured component.

Valid Rule Categories.

Manufacturing.

Action **Expression 1.**

Description: Operation number, operation line number, and the comment number used to identify the operation to be selected for the manufacturing work order.

Expression

Type: Syntax,

Length: 320

Interpreted

Type: Alphanumeric.

Note: In the preferred embodiment, the operation number... ..number is issued, a zero line or comment number normally must also be issued.

Action **Expression 2.**

Description: The piece rate for standard operations or the fixed time load for fixed... ..a plant-wide standard, The number of hours may be labor hours or machine hours.

Expression

Type: Syntax.

Length: 320

Interpreted

Type: Numeric.

Note: Must be a positive number.

C 1991... ..rule may be used to generate user-defined comments to be 10 associated with the **custom** work orders.

Valid **Rule** Categories.

Manufacturing.

Action **Expression** 1.

Description: Destination of the comment for distribution.

Expression

20 Type: Non-syntax (text),

Length: 25

Interpreted

25 Type.

Note: The destination is user... ..manually distributed to the destinations specified and are automatically printed with manufacturing paper work.

Action **Expression** 2.

35 Description: User-defined comment.

Expression

Type: Non-syntax,

40 Length: 250

Interpreted

Type.

45 Note: The comment may be entered... ..a Start Debug Rule,
Valid Rule Categories.

order entry, pricing.

There are typically-no action **expressions** used
in an end debug rule.

0 1991 ANDERSEN CONSULTING

All Rights Reserved

III. RULE... ..the rules and how

the rules are logically associated so that the same set
of **rules** may be adapted to generate **custom** work orders
for any number of product permutations,

Each rule in the preferred system is...screen generation rule uses screen rule definition
fields and does not have condition and action

expressions.

Each standard rule comprises a condition **expression** and zero to two action **expressions**. After a rule is released, the inference engine only executes the action **expression** of the rule if the condition has been satisfied.

The preferred system contains three types of **expressions** for use in the rules: syntax **expression**; text type

expression; and screen detail **expression** (screen generation rules only). Text type **expressions** and screen detail **expressions** are not interpreted by the preferred system, Text type **expressions** are defined by a user and may be, for example, error messages or comments. A user may utilize screen detail **expressions** to define option-select screens. Option-select screens are one method of entering option values...preferred system are possible without departing from the scope of the present invention.

Screen detail **expressions** may contain, but are not limited to, the non-syntax data as shown in Table 17.

Table 17

SCREEN DETAIL EXPRESSIONS

Field Definition

Sequence Number Order the options will appear on the screen.

Option Name Name... ..not required to enter an option value.

© 1991 ANDERSEN CONSULTING

All Rights Reserved

Syntax **expressions** contain the actions which are interpreted and executed by the inference engine.

Each syntax **expression** is comprised of one or more basic syntax **expressions**. Each basic syntax **expression** may be defined as shown in **expression** [1].

III N(V1OPV2)

In **expression** [1], N is an optional negation character, V1 is the first variable, OP is the **operand**, and V2 is the second variable. The inference engine executes the **expression** by processing the variables (V1, V2) according to the function defined by the **operand** (OP). The negation character (N) is available because

the preferred system does not have a "not equal to" **operand**. In order to perform the "not equal to" function, an **expression** may use the "equal to" **operand** in conjunction with the negation character, The negation character may also be used with other logical **operands** to perform a NOT function of the **operand**, such as "not less than" (negation character used with or "not greater than" (negation character used with An example of a syntax **expression** is illustrated in **expression** [2].

[2] (0-LUXURY,EQ.trytt)

Expression [2] will cause its corresponding rule to have a true condition if a user has selected the luxury option. The **expression** means: is the luxury option (0 LUXURY) entered by the user equal to (EQ) yes ("Y"r). If the user has entered the luxury option, the rule incorporating this **expression** will be true, and the preferred system will fire all rules released by this rule when the releasing result is true.

A syntax **expression** may be comprised of multiple basic **expressions**. This may be illustrated by the example as shown in **expression** [3].

[3] ((V1rOP1rV2)rOP3r(V3,OP2,V4))

The inference engine processes multiple **expressions** according to the standard rules of algebra. For example, in **expression** [3], first variables V1 and V2 are processed according to the function of **operand** OP1, and variables V2 and V3 are processed according to the function of **operand** OP2. Next the results of these two operations are processed according to the function of **operand** OP3,

A detailed explanation of the rule syntax particular to each action code (type of... ..calls the program, and the result value determined by the program is returned to the **expression** in the rule for use in processing. The external program is not restricted to a...resolving conflicts when two or more matrices have the same name and database type.

E* Operands

The rules in the preferred system use **operands** to perform operations on the variables described above.

The types of variables in the preferred system may be defined as shown in Table 19. The **operands** in the preferred system may be defined as shown in Table 20.

Table 19
VARIABLE... ..table
T Validation Table
© 1991 ANDERSEN CONSULTING
All Rights Reserved

Imw

Table 20

OPERANDS

Default Valid

operand Types Result Nature of
Codes Meaning (V1V2) Type Operation
LT Less than (N9N) L (V1... ..V2) X V2
= V2 if
remainder is
0 not zero.

Note.

Integer

Division

Default Valid

operand Types Result Nature of
Codes Meaning (V1V2) Type Operation
C1 Concatenate one (AvA) A (V1... ..alpha
numeric
characters or
the first four
non-decimal
numeric
characters of
V2.

Default Valid

Operand Types Result Nature of
Codes Meaning (V1V2) Type Operation
EM Element of Multiple (AIM) L...is
false,
otherwise
true.

IF Logical IF (AIL) A (V1 IF

V2)

(NIL)

Default Valid

operand Types Result Nature of
Codes Meaning (V1V2) Type Operation
SA Substring after (AqN) A (V1...values for the end item and lower-level
items. The pricing configuration controls the pricing
rules in order to generate a **custom** price for the end

item. Front end rules refers to both the order entry rules and pricing rules.

The purpose of the order entry rules in expert **configurator** 100 is to obtain option values required by the expert **configurator** to generate custom work orders.

order entry configuration, therefore, refers to the process of obtaining... ..The back end configuration 111 includes the manufacturing configuration. The manufacturing configuration controls the manufacturing **rules** in order to generate the **custom** work orders for the end item and lower-level items. Back end rules refers to...see FIGURE 9). Step 130 involves the processing and interpretation of the rule conditions and **expressions**, after which the preferred system processes the rule action codes at step 137. A rule...File Name Description
Generated Labor Used to store labor
Requirements requirements generated
by the Expert
Configurator.

MFG Configuration Used to trigger
asynch
Transaction rousous processing of
manufacturing
configuration for a
sales...option values. One way that this may be
accomplished is to associate a configuration code
template to a part, the **template** defining the meaning of
characteristics within the configuration code, The
template format may be defined by a user. For example,
a **template** associated to a speed boat may be described
as shown in Table 28.

Table 28
SPEED BOAT **TEMPLATE**
Position Description
1-3 Model
4-5 Exterior color
6-7 Interior color
8-9...

Claims:

...processing the order entry rules
until the answers are complete and for processingthe manufacturing **rules** until the **custom**
work ordersare complete, the forward chaining means comprising:a) firing means for

releasing the...5 wherein the pricingconfiguration means further comprises forwardchaining means for processing the pricing **rules**until the **custom** price is generated, the forwardchaining means comprising:a) firing means for releasing the pricing... ...The system of claim 3 wherein the order entryconfiguration means further comprises configuredcomponent **rule** means for identifying **custom** lowerlevel items required to construct the end item andfor establishing links between the... ...3 wherein the manufacturingconfiguration means further comprises:a) component requirement means for determining the**components** required for the **custom** work orders;andb) labor requirement means for determining thelabor required for the custom...syntaxmeans for processing first and second variablesaccording to an operation defined by an **operand**within each of the order entry rules and themanufacturing rules.

27 The system of...multiple

options table.32* The system of claim 26 wherein the rule syntax meanscomprises **operand** means for processing the first andsecond variables according to at least one of the...

...configuration means further comprises rule syntaxmeans for processing first and second variables andan **operand** within each of the pricing rules.

36 The system of claim 6 wherein the pricing...multiple options table.

40 The system of claim 35 wherein the rule syntax means

comprises **operand** means for processing the first andsecond variables according to at least one of the...

? d s

Set	Items	Description
S1	88274813	S PD<20010831
S2	272865	S (CUSTOM OR CUSTOMIZE OR CUSTOMIZES OR CUSTOMIZING OR CUSTOMIZABLE OR CUSTOMIZATION)(3N)(PRODUCT OR PRODUCTS OR COMPONENT OR COMPONENTS OR VEHICLE OR VEHICLES OR CAR OR CARS OR AUTOMOBILE OR AUTOMOBILE OR COMPUTER OR COMPUTERS)
S3	118168	S S1 AND S2
S4	734	S S3 AND (CONFIGURATOR OR CONFIGURATORS)
S5	34	S S4 AND ((CUSTOM OR CUSTOMIZE OR CUSTOMIZES OR CUSTOMIZING OR CUSTOMIZABLE OR CUSTOMIZATION OR TAILOR OR TAILORS OR TAILORED OR TAILORABLE OR TAILING)(5N)(RULE OR RULES))
S6	14	S S5 AND (EXPRESSION OR EXPRESSIONS OR TEMPLATE OR TEMPLATES OR NATURAL(W)LANGUAGE OR OPERATOR OR OPERATORS OR OPERAND OR OPERANDS OR BOOLEAN OR FORMULA OR EQUATION OR EQUATIONS)

?